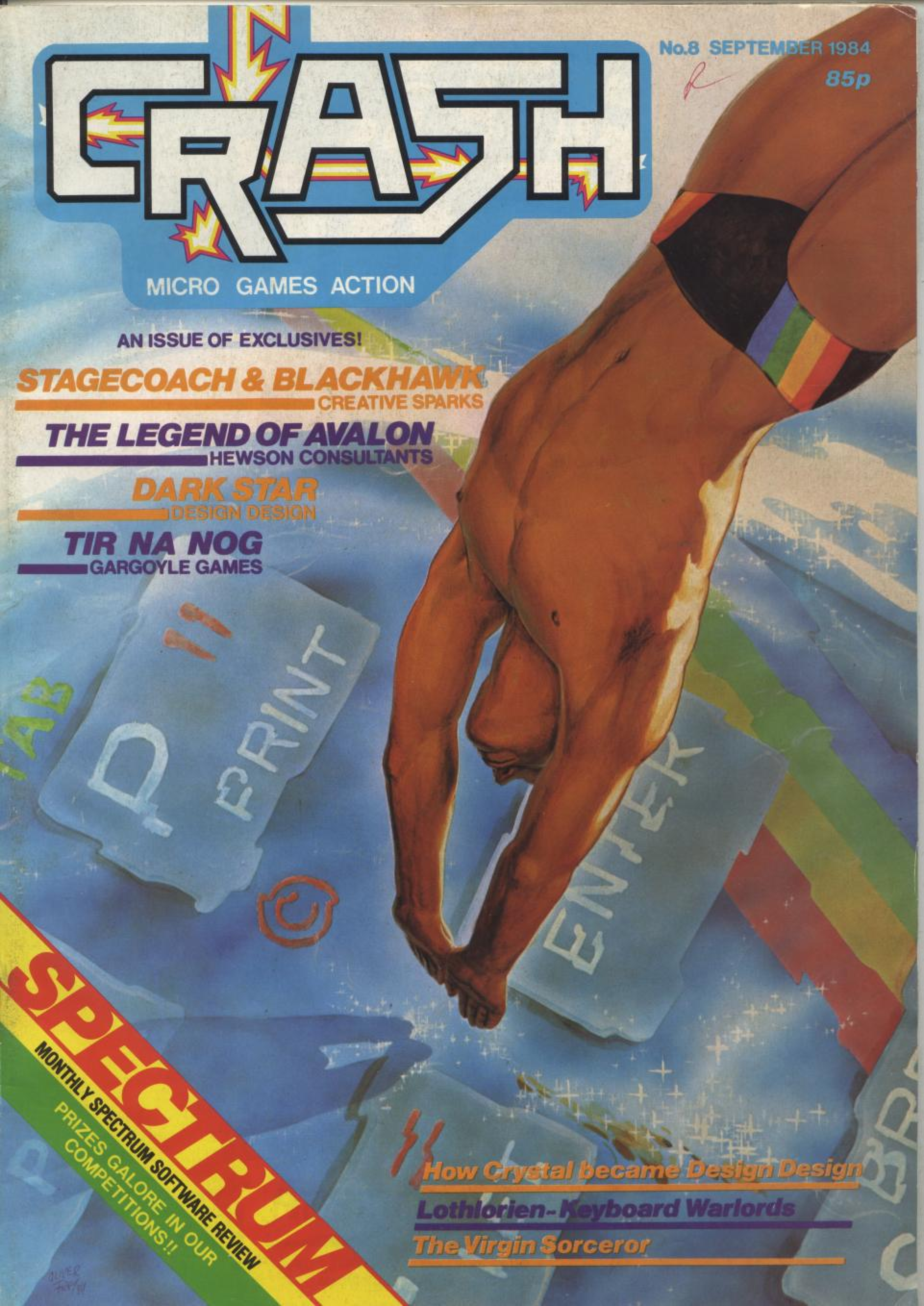
No.8 SEPTEMBER 1984
85p

CRASH

MICRO GAMES ACTION



AN ISSUE OF EXCLUSIVES!

STAGECOACH & BLACKHAWK
CREATIVE SPARKS

THE LEGEND OF AVALON
HEWSON CONSULTANTS

DARK STAR
DESIGN DESIGN

TIR NA NOG
GARGOYLE GAMES

SPECTRUM

MONTHLY SPECTRUM SOFTWARE REVIEW

PRIZES GALORE IN OUR COMPETITIONS!!

How Crystal became Design Design

Lothlorien - Keyboard Warlords

The Virgin Sorceror

Trade Enquiries:

Microdealer
0727 34351

Prism
01-253 2277

Wynd up
061-872 5020

Ferranti + Craig
0722 33022

Pinnacle
0689 73141

Centresoft
021-520 7591

Lightning
01-969 8344

P.C.S.
0254 691211

R + R
0226 710414

Drake
0752 672235

Twang
0734 508608

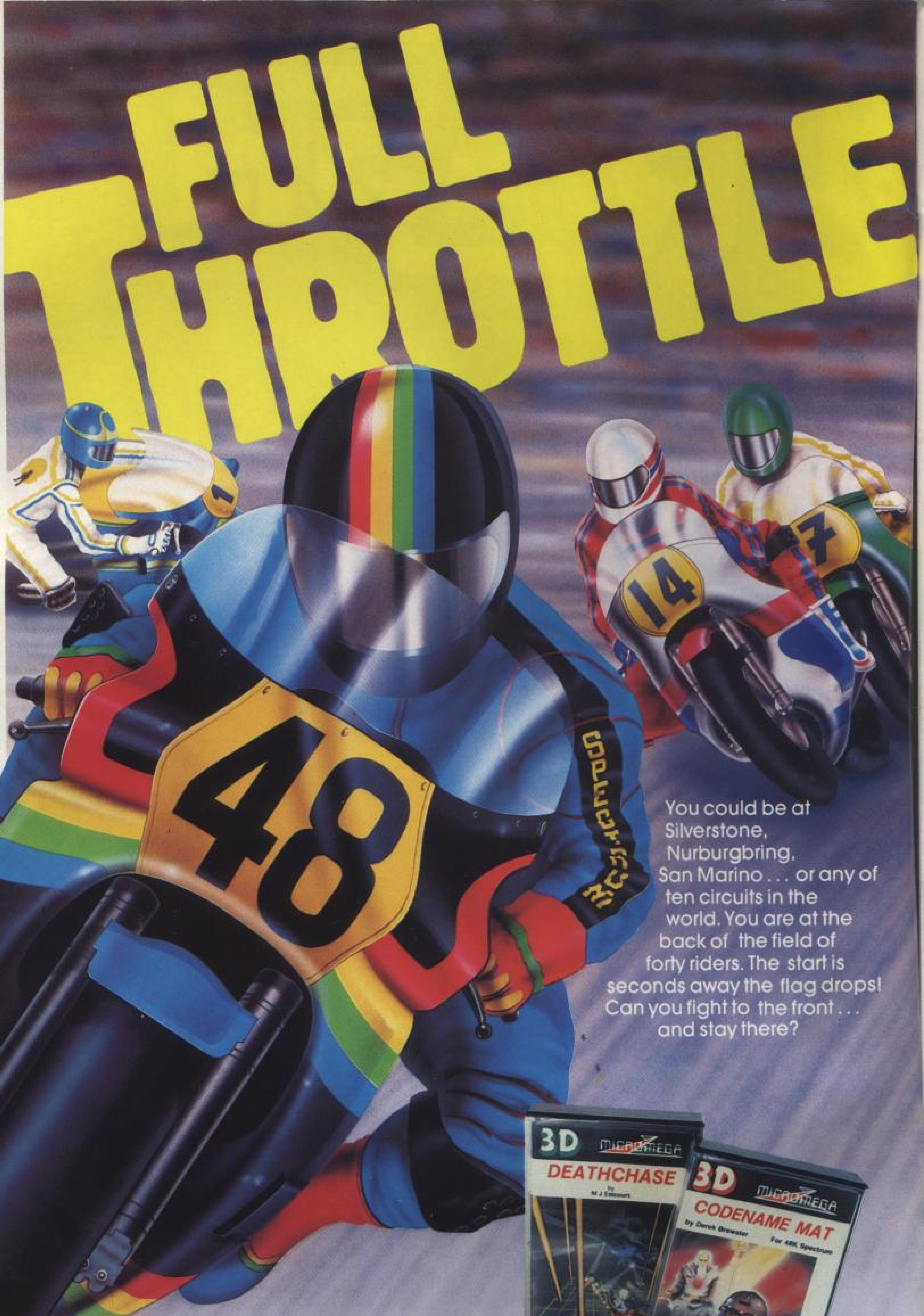
Thorn-EMI Computer
Software Distributors
0252 518364

Wayfarer
0743 66922

LVL
0602 394000

Websters
0483 62222

Tiger
0925 55222



Available through selected branches of

spectrum Boots John Menzies WOOLWORTH

and other good computer stores everywhere.

MICROMEGA

Compatible with Kempston, Protek/AGF, and Interface 2 joystick types.

3D Motor Bike Grand Prix on the 48K Spectrum — £6.95



CRASH

MICRO GAMES ACTION

ISSUE 8 SEPTEMBER 1984

Contents

Editor
Roger Kean
Consultant Editor
Franco Frey
Production Designer
David Western
Art Editor
Oliver Frey
Adventure Editor
Derek Brewster
Staff Writer
Lloyd Mangram
Contributing writers
Matthew Uffindell
Chris Passey
Client Liaison
John Edwards
Subscription Manager
Denise Roberts
Circulation Manager
Tom Hamilton
All circulation enquiries should ring **021-742 5359**

Crash Micro is published monthly by **Newsfield Ltd.**, 1/2 King Street, Ludlow, Shropshire.
General correspondence to:
PO Box 10, Ludlow, Shropshire SY8 1DB

Telephone numbers
General office 0584 5620
Editorial/studio 0584 5851
Advertising 0584 5851
Hot Line 0584 3015

Photosetting by SIOS, 111 Salusbury Road, London NW6
Colour origination by Scan Studios, 44 Wallace Road, London N1
Printed in England by Carlisle Web Offset (Member of the BPCC Group), Newtown Trading Estate, Carlisle.
Distribution by COMAG, Tavistock Road, West Drayton, Middlesex UB7 7QE

Subscriptions: 12 issues £10.50 (UK Mainland post free) Europe: 12 issues £17.50 (post free)

Cover by Oliver Frey



It's been a summer of gloom and doom highlighted by the disappearance of **Imagine**, **Carnell**, **Rabbit** and some others.

Software and computer retail outlets have been moaning that nothing is selling and software companies have been upset that stocks aren't being re-ordered. Some people are even saying that this coming Christmas, usually the good time, is going to be poor for sales.

Boris Allan in the **Ziggurat** column (*Popular Computing Weekly, 19-25 July*) says tht at one time software houses like Imagine were thriving with so much money boosting the coffers that the small disagreements which existed within the company, hardly seem to have mattered. But now the money is no longer coming in at a rate that will produce the enormously rich, with enormous cars. He also goes on to say, quite rightly, that the problem with Imagine (and nearly every other software house) is a lack of imagination.

But in the first point, the full coffers, is it really the case? Imagine excelled at one thing very well, publicity. In a short space of time the company became one of the best known in the software business. It never hesitated to point out to journalists (national press as well as computer press) how much every square foot of carpet in the offices cost, how much every hand-crafted nut and bolt in Mark Butler's custom motorbike cost, how many thousands of pounds worth of Sage computers it owned for software development. It hit the headlines again and again with fanciful stories of teenage programmers earning £35,000 a year. If you are very successful at creating an image of success, then it's amazing how willingly banks and other investors will pour money in. The partwork publisher Marshall Cavendish was prepared to front a quarter of a million pounds to develop games for their *Input* magazine – at which point it became clear that despite all the ad campaigns, despite *Arcadia* and *Zzoom*, despite the media hype, Imagine did indeed lack imagination.

The point I'm making is this: are we really looking at a slump in the software market or are we looking at a case of severe indigestion?

Early in 1983, about the time Imagine was forming around the success of *Arcadia*, there were only a handful of software houses producing Spectrum games. Today there are in the region of four times that number. Then it was almost impossible to purchase a cassette from a shop – a few W H Smith branches were displaying about ten games, computer retail outlets mostly sold hardware and there were only fractions of today's number of shops anyway. Most software houses emerging from the back page classified's of the magazines were still doing sales via their own mail order. Today hardly any significant mail order sales are made and there are literally hundreds of computer retail outlets selling software, and now newsagents have joined in as well.

May it not be the case that we are looking at a market that certainly has grown with more Spectrum's sold but that has not, however, expanded at the rate at which the retailers and producers have done? In other words, there aren't enough punters in the market to go around. It would be very easy to see that during last summer (also not particularly good for sales) everyone did better than during this summer, and interpret it as a disastrous, possibly terminal slump in the market.

If you take this into account along with the collapse of apparently blue chip companies like Imagine, then the situation certainly does look gloomy. The real point in Imagine's case is whether they really ever made the kind of money of which they so openly boasted? I don't think so. Flashy cars and big houses can be easily bought with small personal profits from a rising company's coffers using mortgages and hire purchase. Offices can be expensively fitted out using the goodwill and credit of local suppliers who can see from their newspapers and telly that the purchaser is doing well – why worry about the money? In truth *Arcadia* and *Zzoom* were Imagine's only real big sellers. Was their PR true?

At one point Mark Butler was heard to say that 75% of all Spectrum owners had bought *Arcadia*. Assuming at that time that half a million Spectrums were sold, that would have meant 375,000 copies of *Arcadia* had been purchased. This is a ludicrous figure! As any honest software house will tell you, a sale of 25,000 cassettes is good, 40,000 is a best seller and anything over is simply marvellous.

Something well in excess of a million Spectrum's sold may seem a lot. In comparison with the numbers of record players or cassette decks in use in British households it is probably in the region of one-fortieth. Consequently the market for music is far larger and sales figures in the music business are going to be a great deal higher. Companies like Imagine, with all their media hype, managed in a very short space of time to convince everyone that the British games software industry was a boom area like British music. Well true, but to only one-fortieth of the size.

As a result software houses and retail outlets blossomed, jumping on the software bandwagon, and the market did expand, but not to the tune that the new entrepreneurs expected it to – because they hadn't seen through the hype. And so many of the new software houses hadn't seen through the gauzy haze of delight that all you had to do to make a few mega-bucks was churn out yet another *pac-kong* and punt it out at £6. **Rabbit** is a good example. Like Imagine, they were also capable of quite successful hype, not in the press so much, but certainly with dealers. Claims of 60,000 cassettes sold per month in the summer seem highly exaggerated. In truth the only two games of theirs I have seen that were worth anything were *Escape MCP* for the Spectrum and *Troopa Truck* for the Commodore. They too had lacked imagination as a company.

In **Ziggurat**, Boris Allan adds that more people seem to want serious software, useful software and not mega-games. Our impression at CRASH is that people certainly don't want mega-games at £40. What counts as useful or serious, says Boris, can vary tremendously with the individual. Games *are* serious and useful – they're entertaining as well, of course, or at least they should be. Our impression is that people still want games, good ones, imaginative one, games that are serious and useful in that they stretch the skills and abilities of the player. And we are fortunate that Britain possesses some very talented programmers who have been busy this year stretching the abilities of the Spectrum to match the expectations of the player.

I was asked recently what I thought was most exciting about the Spectrum as a computer and I replied to that effect that it was the way reviewers were able to say of a game that it had gone as far as the Spectrum could be pushed, only to have to eat their words the following month. As a nation of computer buyers and users we are going to have to make some serious decisions very soon. In fact the most serious decision about the future of British computing is being made without our consent as users. I'm talking about the introduction of **MSX** as a so-called standard. Well commercial decisions are frequently taken without the consent of the public in their presumed best interests. And **MSX** is being sold as being in the best interest of the consumer – a standard whereby any game written for any machine will be available for your machine, as long as it's an **MSX** machine or can interface properly.

The Japanese have failed or faltered in their attempts to force **MSX** on Americans and have, instead, turned their eyes towards the next best market – Britain. We're being used as a sort of test case. But it isn't just a jingoistic or nationalistic urge which makes me alarmed that computers like the Spectrum or the Amstrad may be swamped by some foreign import standard. It is quite simply the fact that we don't need **MSX** and **MSX** is no good. **Simon Bratell** of Design Design (used to be Crystal Computing) puts the case strongly and well in our article *Rebirth of the Things*. A standard which is bound to appeal to software houses because of its ease of making simple sprite type games on a widely acceptable scale, is

being introduced and heavily marketed which force programming into narrow and inescapable channels. If **MSX** grabs a hold, then you can wave goodbye to the exciting and heady days of programming advances such as we have been privileged to see on the Spectrum. We'll be selling British innovation down the drain for the sake of a convenient standard and settling for a period of stagnation in games development. And make no mistake, America may be able to produce Hollywood on the Commodore, but Britain produces the high flying ideas on the Spectrum and will probably do so on the Amstrad.

Development of innovative software *does* take time; often five months of a programmer's time may go into a game (there are many games we can see where that's patently not the case, but I'm talking here about serious programmers!) and that time *must* be paid for. It's quite clear that a software house with respect for its customers, producing these more serious types of games cannot do so for a retail price of £1.99. You don't have to be the least bit discerning to realise that few of the games which have yet been released at these low prices are in any sense original or really worth even the low price when it comes right down to it.

In the same issue of *Popular Computing Weekly*, its editor in his *View* column remarks on the number of software houses joining the budget software bandwagon as a reflection on the stagnation of software sales. As I have already pointed out, a lot of the so-called slump is actually due to the glut of cheap looking (if not cheap priced) software. But a lot of companies indeed are joining the cheap bandwagon, and the operative word here is 'budget' software. That means the game, its contents and its program qualities are produced *down* to a price. As with **MSX**, by insisting on software houses not charging the £4 plus price we have been more used to, we are pushing the games software market into a cul-de-sac from which it might find it difficult to emerge – to our detriment. Imagine have been responsible for a lot – not the least being that when anyone wants to complain of software house rip-off prices for games they always equate the company with Imagine and mention fast cars and hand-made motobikes. Imagine have created an image for the software houses that doesn't sit fairly on almost all of them.

At CRASH we have always taken the view that, depending on the complexity of the game, a price of between £5 and, say, £6.50 is a fair one as long as the game deserves it. These prices existed in the good times, they exist in the bad times. If software houses can really write good programs at a price of £1.99, well fine and good, we'll support their efforts. But what is most urgently needed is some commonsense, an ability to look beyond the immediate muddle, to be able to strip away the false hype from the real enthusiasm; there's a need for the inefficient and possibly uncaring retailer to cease spreading despondency because his false hopes haven't been matched by tough reality. Here at CRASH we hear from a number of retail outlets, and as many have done really well this summer as have had a miserable one. That's not surprising because, just like software houses, there are innovative, knowledgeable shopkeepers who offer quality for money and there are those who put profits and commercial considerations above the customers' needs. Like retailers and software houses, there are good times and bad times – it's a closed circle – we must make sure we get the best from the good times and support those through the bad times who help to make the good times even better.

COMING TO THIS SCREEN SOON...

As if to underline the points I have been making so far, there are two marked differences between this and any previous issue of CRASH. On the one hand there are many less reviews than usual because the summer months have depleted the market of as many new games as there have been before (although the handful includes some excellent ones); and on the other hand we have been privileged to see rushed preview copies of three games by three very different software houses which, in their varying ways, are each going to push the outer limits of Spectrum programming even further out.

Yes, people have been right – this summer has seen a weeding out, although by no means to the gloomy degree predicted earlier. But it has also acted a bit like a forge fire, tempering the steel of those software houses determined to offer value for money. I think this issue offers happy reading on several levels – Enjoy!

ROGER KEAN

ADVERTISERS' INDEX

INDEX TO GAMES REVIEWED IN THIS ISSUE

LETTERS

I am told by Lloyd Mangram that several letters each month sent to him enclose mail order forms and payments. I know it's often convenient to send two different items in one envelope (and cheaper on the postage) but readers who enclose mail order material with letters to the editorial side run the risk of delays in receiving their goods. The reason for this is that anything addressed to a competition or to Lloyd may well sit unopened for up to a week. So, in your own interests, please send anything to CRASH MAIL ORDER separately.

APOLOGY TO SALAMANDER

In the August issue of CRASH we wrongly stated that **Salamander Software** had collapsed. The information that they had done so came from seven independent sources. Salamander Software have been understandably distressed by this, and as a retraction we print the following statement from them:

As you are no doubt aware, there are a number of rumours that **Salamander Software** has gone bust; even to the extent of being printed as a statement of fact recently by one of the computer magazines. This is news to all of us here at Salamander. We feel that it would be useful and desirable to our loyal customers, and to inveterate rumour mongers, to inform them in black and white that Salamander *is alive and well* and currently working on new projects designed for release towards the end of the year. We do not deny that the annual summer slump of software sales has caused us to tighten our belts a notch or two, but we are not in a position of having to cease trading and do not foresee this happening in the future. We are only a phone call away, so should anyone else feel the urge to write us off, we would appreciate the decency of a phone call before organising the wake (don't forget to invite us!).
SALAMANDER SOFTWARE

A Crash Smash

BLACK HAWK

Producer: **Creative Sparks**
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Phil Snell & Dean Lock**



A detail from the attack screen with tank and three factories

Black Hawk is an arcade shoot em up of positively violent proportion. It is also a fairly complex game to get into at first and requires some concentration on the detailed inlay instructions. It is also the first translation to the Spectrum of the popular arcade game 'Xevious'. We would have to say at the outset, however, that the Spectrum's display isn't up to the quality of a dedicated arcade machine, so no one must expect those extraordinary graphics. On the other hand, Creative Sparks have added some other interesting features and this is a game which uses 'Xevious' as a departure point rather than trying to be a copy.

The time is the near future and the place is a group of heavily defended islands. You are flying your Black Hawk. Your mission is to seek out and destroy enemy airfields and missile launching sites. There are, however, many other installations to destroy. Up against you are enemy anti-aircraft guns, helicopter gunships, SAM missiles and missile launchers. The success of your mission is gauged by your SLF figure (Strategic Loss Factor) – in other words you get points for targets destroyed, i.e. tanks, rockets, SAMs, aircraft, ships, gunships, jets, helicopters and others. 'Others' are ground installations like factories.

Your aircraft has a computer attack system which features a two-screen display – the defence screen and the attack screen. In the attack screen a small yellow U at the bottom indicates your vertical position and a white cross-sight may be moved over targets. When it turns red, a missile is automatically fired to detonate the target. It can be used to destroy flying targets as well as ground targets, but any flying target which reaches the base of the screen will cause your computer to flip automatically to the defence screen. This shows the Black Hawk at the base of the screen and the approaching objects will soon appear at the top, flying rapidly down towards you. In this screen you may use your cannon to destroy the enemy. Successfully destroying them will return you to the attack screen again.

Your object is to gain a high OTPF (Optimum Target Percentage Figure). At the end of a mission this figure is calculated and, if high enough, additional weaponry may be added to your craft for further missions. Weaponry may also be removed if you fall below the appropriate figure. The weapons are **ECM Pod** which detects radar, radios and listening posts; **X Cannon** which increases fire power in the defence system; **Blitvig** which destroys all visible enemy units and is limited in use by your OTPF; and finally, the **Wild Weasel** which makes you invulnerable for a short time and may only be used once per mission.

This gives a brief (!) run down of what to expect from *Black Hawk* – there is more to it. Two skill levels, Rookie and Honcho, plus increasing difficulty.

CRITICISM

● 'I haven't had as much fun since the last May fair brought the arcade machines to town for three days. I also have a very sore first finger from firing! The general trend recently has been away from shoot em ups to more complex adventurish games, but there's always room for a really good shoot em up – and this is one of those. An awful lot is going on even at the start and on the lower level of skill, and by later missions the shrapnel is flying like snow in a blizzard. The graphics are all fairly small, although nicely detailed but they move very fast and smoothly and the down scrolling landscape is very smooth as well. Perhaps the only difficulty which is a bit aggravating is that the cross-sight when white is a bit hard to see on the blue of the sea. *Black Hawk* is a shoot em up that requires a great deal of concentration as well as very good hand and eye co-ordination. Extremely addictive!

● *'Just what the doctor ordered! A fast, aggressive, brilliant shoot em up! First loading the game and reading through several screens of information, I decided to take on the task of destroying everything in sight and so I found myself confused by the way the screen kept on flicking over from one image to another. This is quickly overcome with several playings of the game, although to be fair it is indicated in the instructions on the inlay. It took me about half an hour to get used to the aggressive style this game plays by which time I was totally absorbed by the sheer single-mindedness of the enemy I was up against. The more I played this game, the more I wanted to play it, while the computer was throwing more and more defensive weapons at me in an attempt to eliminate me. The graphics come in various sizes from small to large but all reasonably in scale with each other. The various enemy objects are realistically animated, recoiling guns, rotating helicopter blades, rotating radar dishes etc. Colour and sound have both been used very well. This has got to be the best shoot em up game I've seen for an age, one that has loads of playability and addictive qualities and I still haven't seen what is yet to come.'*

● 'I thought this was going to be a flight simulation game, little did I know that I was to be dumped in the midst of a raging battle. First impressions are rather daunting with all the instructions written in future jargon, but never fear, once into the game you can forget most of them. Also, at the outset the graphics seem a little disappointing, quite simple really, but somehow after half an hour's play they all seem fine, indeed very good, and suddenly there are so many things all over the place, whizzing, whirling and firing. Shoot em ups haven't exactly vanished from the scene thank goodness, but *Black Hawk* may well start a full-scale revival!'

COMMENTS

Control keys: cursors, or Q/A up/down, O/P left/right with 0 to fire
Joystick: Kempston, ZX 2, Fuller, AGF, Protek
Keyboard play: very responsive
Use of colour: very good generally, one small problem with the cross-sight
Graphics: very good, smooth and detailed, very fast
Sound: good noises and tune
Skill levels: 2 but increasing difficulty by mission
Screens: 2
Originality: losely based on arcade original 'Xevious', but as a Spectrum shoot em up, entirely original
General rating: an excellent, addictive, fast arcade game.

Use of computer	91%
Graphics	89%
Playability	95%
Getting started	92%
Addictive qualities	95%
Value for money	87%
Overall	**92%**

MATCH POINT

Producer: **Psion/Sinclair**
Memory required: **48K**
Retail price: **£7.95**
Language: **machine code**

So many of the better games this summer seem to be sports simulations of the active kind rather than the strategic armchair sort, of which type *Match Point* is a supreme example. We've come to expect rather special programs from Psion and *Match Point* doesn't disappoint. It points up the advances in Spectrum programming which underlines to some extent comments made by Crystal/Design Design programmer Simon Brattel in this issue about the versatility of the video display of the Spectrum encouraging programmers to write better and better looking programs. *Match Point* would have been almost inconceivable this time last year, so too would Database's *Micro Olympics*.

There is an arcade version of tennis which does look good, but apart from the coloured sprites of the players there is little that Psion's *Match Point* can't do to match the arcade original, and in fact the perspective view is more realistic.

The game is for one player against the computer or two players against each other, although the flexible front end allows you to enter not only your own name but also that of the computer so if you want to you can have the thrill of beating McEnroe (or being beaten by him of course!) or Navratilova if you prefer.

The screen display, prominently green naturally, shows the tennis court from the 'commentators' box' position, looking straight along the centre of the court from one end. At the 'back' is the scoreboard, and to either side are spectators who convincingly turn their heads to follow the movement of the ball. The two players are fully animated and the movement of the ball results in its shadow being seen on the grass to help you judge its position. Further detail is added by the ball boy who runs in to collect net serves.

Games and scoring are quite authentic for lawn tennis, a match being played over three or five sets with the winner being the player to win either 2 or 3 sets respectively. Six games make up a set, the winner having a clear lead of 2 games, although a tie-break comes in automatically should the score reach six games each, except in the final set when play continues until one player achieves a two game lead. As you can see, stamina is required. Game scoring follows full rules including deuce and advantage. Players change ends of court automatically at the correct moment and service follows the accepted pattern.

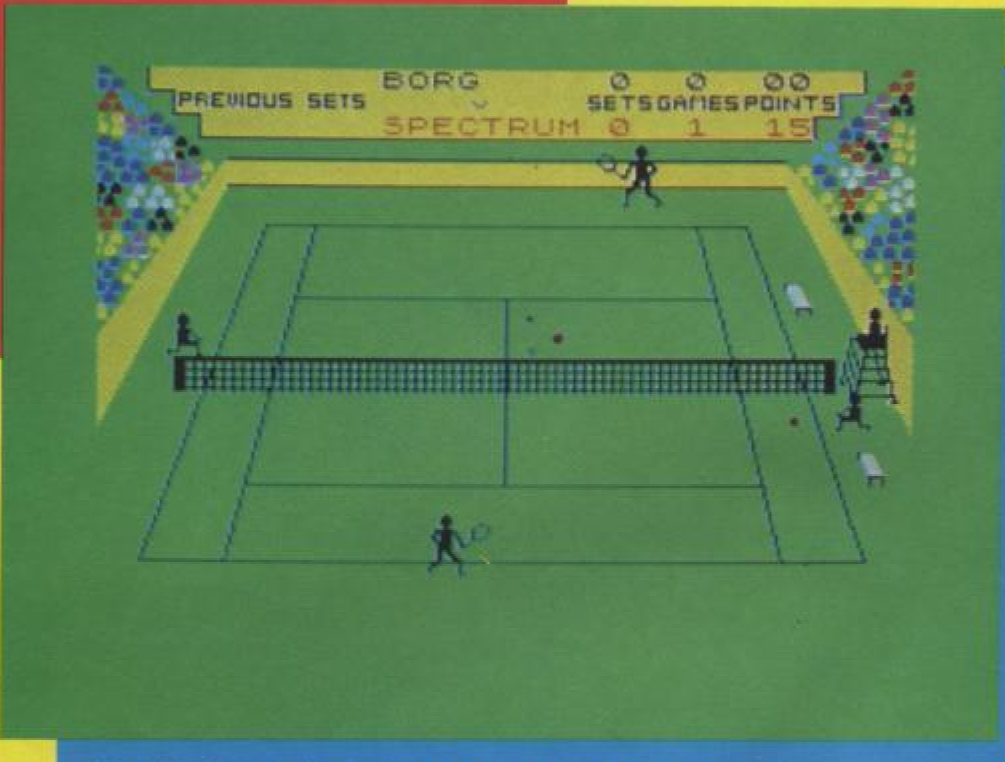
The game can be controlled by keys or joysticks with fire being used to serve and change racket swing. The movement, speed and position of the ball can be determined by type of swing, where the ball hits the racket and at what moment during the swing the contact is made. All this adds up to an extremely realistic program.

CRITICISM

● 'At last someone has had the guts to reproduce the game of tennis on the Spectrum, and they have made an exceptionally good job of it. Every detail has been really polished even down to the spectators' heads moving left and right with the ball. Ball boys do a great job as they run realistically across the court. This must be the ultimate yet in sports simulation. A great feat of programming. Great!'

● 'Match Point *is an interactive tennis game where the players move about and hit the ball very well. A point against the game is that the automatic change from forehand to backhand and vice versa can cause more problems than it's worth. I would prefer to be in complete control. Forced changeovers can cause problems! Generally, though, this is a very playable and addictive game. It is certainly a vast leap over the very first tennis games. Remember them – the first TV arcade games with two flat bats and a ball in black and white?'*

● 'If you become worn out – and you will – then you can sit back and watch the computer play an exhibition match played by middle, senior or top seeded tennis stars until you feel well enough to take the court again. The colouring of the graphics is sensible rather than exciting, black figures on the green background, but the animation and speed with which they move more than makes up for any disappointment caused by Spectrum colour problems. *Match Point* calls for considerable skill in placing the ball where you want just as in the real thing, and I can't imagine anyone becoming bored with it very quickly. Addictive in fact.'



What the deuce, take advantage of the sun and serve an ace

COMMENTS

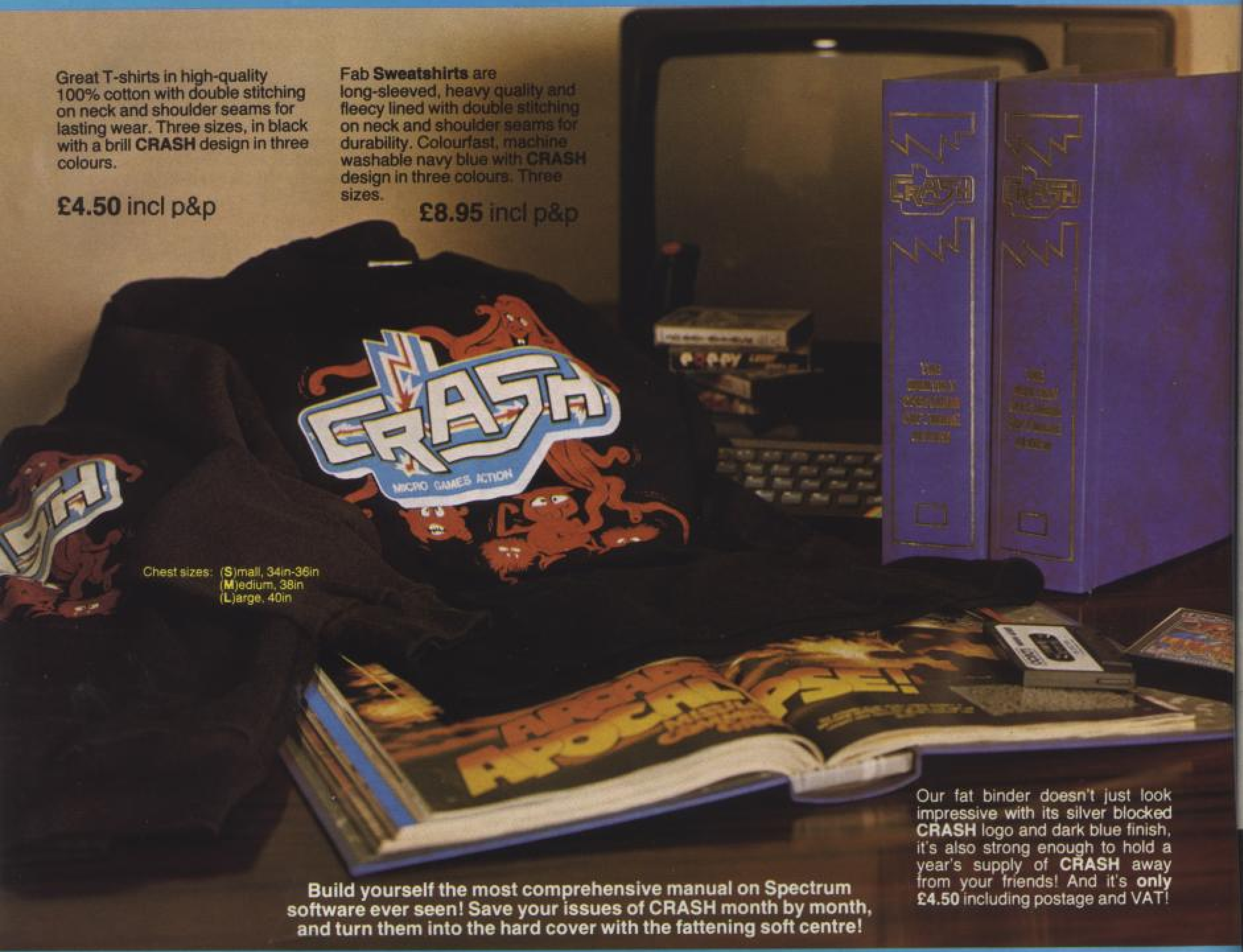
Control keys: selected: (2 players) S or J/D or K move left/right, 1 or 0 Q or O move up/down, CAPS/SPACE swing racket. But all keys may be user defined
Joystick: ZX 2, Kempston
Keyboard play: responsive
Use of colour: sensibly used without attribute problems
Graphics: very impressive, smooth and fast with a deal of realism
Sound: not much at all, but hardly affects play
Skill levels: you may play quarter, semi- or finals, entering at any level, each increasing in speed and computer skill
Originality: highly original from the programming point of view to have achieved the level of this game

General rating: excellent and addictive to play, so much so that it's rather high price seems well justified.

Use of computer	87%
Graphics	92%
Playability	90%
Getting started	87%
Addictive qualities	92%
Value for money	86%
Overall	**89%**

CRASH
MICRO GAMES ACTION

T-shirts & Binders Offer



Great T-shirts in high-quality 100% cotton with double stitching on neck and shoulder seams for lasting wear. Three sizes, in black with a brill **CRASH** design in three colours.

£4.50 incl p&p

Fab **Sweatshirts** are long-sleeved, heavy quality and fleecy lined with double stitching on neck and shoulder seams for durability. Colourfast, machine washable navy blue with **CRASH** design in three colours. Three sizes.

£8.95 incl p&p

Chest sizes: (**S**)mall, 34in-36in
(**M**)edium, 38in
(**L**)arge, 40in

Our fat binder doesn't just look impressive with its silver blocked **CRASH** logo and dark blue finish, it's also strong enough to hold a year's supply of **CRASH** away from your friends! And it's **only £4.50** including postage and VAT!

Build yourself the most comprehensive manual on Spectrum software ever seen! Save your issues of CRASH month by month, and turn them into the hard cover with the fattening soft centre!

FREE IN-DEPTH INDEX!

As **Lloyd Mangram** mentioned in his letters page, he's been told to get it together (we've generously provided him with a second tiny desk) and organise an Index for the 12 issues your binder will hold. The index is **absolutely FREE** to anyone who orders the binder and will be sent automatically in January.

So make sure you turn your issues into the **CRASH Spectrum Software Encyclopaedia!**

Be a Superior Alien with your very own CRASH T-shirt and sweatshirt!

Please send me ....CRASH T-shirts @ £4.50 **S**☐ **M**☐ **L**☐

..............**Sweatshirt** @ £8.95 **S**☐ **M**☐ **L**☐

Please send.............**CRASH** Binder(s) at **£4.50**
(overseas orders please add 40p).

Name: ....

Address: ....

....

....

I enclose Cheque/PO payable to CRASH MICRO £....................
Please allow 28 days for delivery

CRASH MICRO, Freepost, Ludlow, Shropshire SY8 1BR

SABRE WULF

ULTIMATE
PLAY THE GAME

48K SINCLAIR ZX SPECTRUM
£9.95

CURRAH μSPEECH



Speech Synthesiser for ZX Spectrum

The **CURRAH μSPEECH** is ready to talk immediately on power-up, has an infinite vocabulary and outputs speech and ZX Spectrum sound through your TV speaker. There is no software to load with **μSPEECH** — sophisticated Gate Array technology means you can just plug in and start constructing words and sentences like this:
LET S$ = "sp(ee)k (nn)(oo) (ee)vll" will say "speak no evil"! Further commands control the "voicing" of keys as they are pressed, and an intonation facility allows you to add expression to the speech.

μSPEECH is fully compatible with ZX Interface 1 and may be used with the **CURRAH μSLOT** Expandable Motherboard, allowing easy expansion of your ZX system. **μSPEECH** and **μSLOT** will also be compatible with the **CURRAH μSOURCE** unit when it arrives later this year, allowing you to write **Assembler** and **FORTH** statements directly into your **BASIC** programs!

Top selling games like ULTIMATE'S Lunar Jetman feature **μSPEECH** voice output — watch out for other titles from Bug-Byte, CDS, Ocean, Quicksilva and PSS.

μSpeech, μSlot and μSource are trademarks of Currah Computor Components Ltd.
ZX, ZX Spectrum and ZX Interface 1 are trademarks of Sinclair Research Ltd.

μSPEECH is available from COMET, W.H. SMITH, WOOLWORTHS, GREENS, BOOTS, JOHN MENZIES, SPECTRUM STORES and good dealers nationwide — or use the form to order the **CURRAH μSPEECH** — winner of the CTA 'Product of the Year' award 1984.

CURRAH

To: MicroSpeech Offer, P.O. Box 1, Gateshead, Tyne & Wear, NE8 1AJ

Please Supply .... **MicroSpeech** unit(s) at **£29.95** each incl. VAT & P & P

.... **MicroSlot** unit(s) at **£14.95** each incl. VAT & P & P

Name (please print) ....

Address (please print) ....

.... Postcode ....

CR1

I enclose a cheque/PO payable to 'MicroSpeech Offer' value £ ....

or debit my Access/BarclayCard No ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Cardholder Signature ....

Credit Card Hotline 091 - 482 4683 Please allow 28 days for delivery. Offer valid UK only

See us at the PCW Show Stand 329

DECOR WRECKERS

Producer: **Scorpio Software**
Memory required: **48K**
Retail price: **£1.99**
Language: **machine code**
Author: **Andrew Reed**

In a way *Decor Wreckers* resembles Terminal's *Carpet Capers*, except that it's infinitely cheaper and more playable. As in *Carpet Capers* you have to cover something while nuisances are undoing your good work.

Basically *Decor Wreckers* is a 'Painter' type game. You play the part of a paint roller (makes a change from fighting paint rollers off). The screen is blue, you must paint it yellow, all of it. The trouble is that there are various insects and creatures, Sid Spider (who else!), Freddie Fly, Bertie Bugg and Sammy Snail, all of whom crawl or fly about wiping off the paint. The object of this very simple game is to get the screen all painted and get your roller 'home' in the bottom right hand corner before any nasty can damage the paintwork.

Succeeding in this mission will promote you to the next screen where there are more nasties at work. Unfortunately you only have a limited amount of paint per roll. Running out of paint is tantamount to losing a life.

CRITICISM

● 'The keys are responsive and the sound is fair, but it could all be better, and the graphics are a bit jumpy. After about an hour's play I started to get really bored with this game because there is so little variation.'

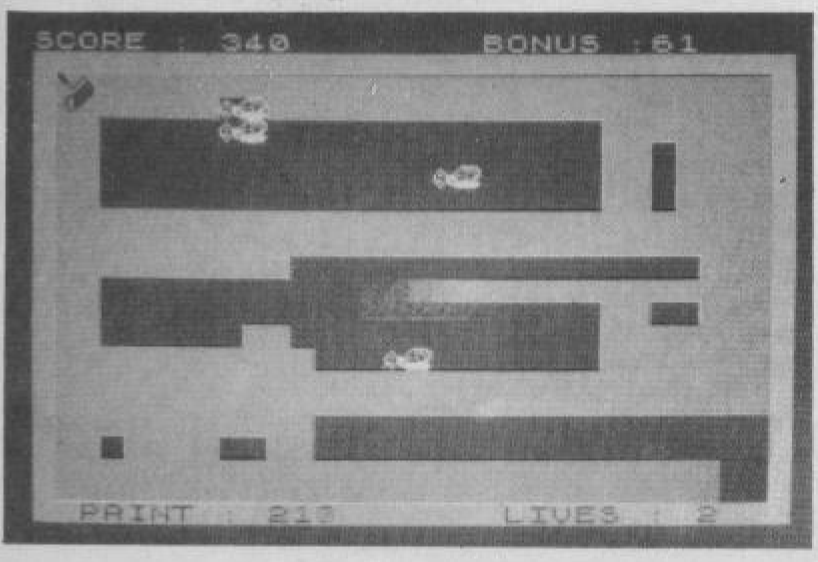
● *'Bad memories came to mind when this one turned up – mainly* Carpet Capers. *The extra low price didn't help in convincing myself that it may be good.* Decor Wreckers, *however, is quite high quality for the price! Keyboard response is very good and it needs to be because the pace of the game is quite fast. Painting the screen is fun at first with the interlopers to interfere with your handywork. As the game progresses more things spoil the paint and the game rapidly becomes unplayable. Colour and sound have been quite well used and in all it makes a good game at the price with plenty of frantic action.'*

● 'The graphics and movement are neat and fast, also reasonably smooth. *Decor Wreckers* was great fun to play – for about fifteen minutes or so. And that's the central problem. The concept is so very simple that it can't possibly hope to hold anyone's interest for very long. It's really a very early Spectrum type game with improved graphics. However, at its price it may well appeal, though whether you'll feel its low price is worth it for the simplicity you get it another matter.'

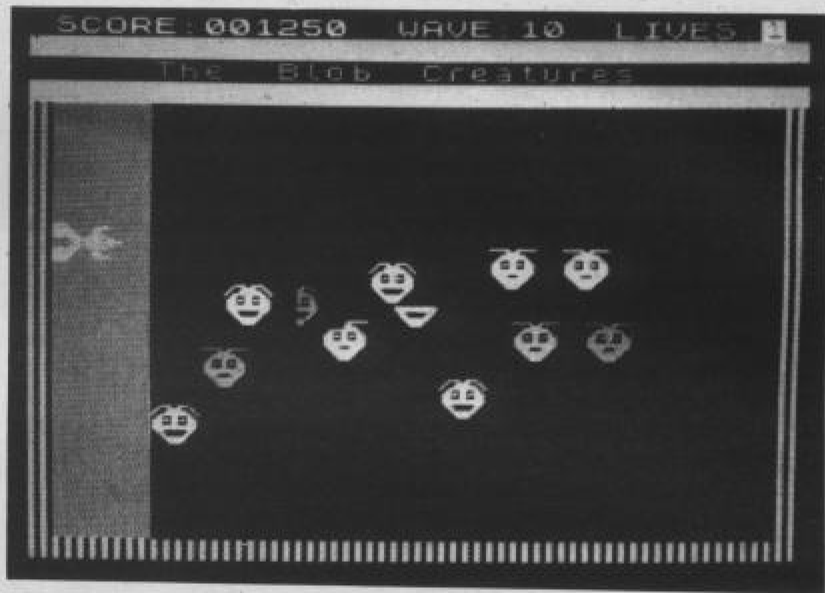
COMMENTS

Control keys: good, Q/A up/down, O/P left/right
Joystick: Kempston
Keyboard play: responsive and fast – there's also a neat touch that the roller can cover a full width of the roller or a half width which forces your reactions to be more efficient
Use of colour: fair to good, very straightforward
Graphics: simple, but reasonably detailed and fairly smooth moving
Sound: fair
Skill levels: 1 but gets harder with each screen
Lives: 3 fills of paint
Originality: not very as based on 'Painter' type game, but a reasonably novel approach
General rating: fair to average.

Use of computer	58%
Graphics	52%
Playability	52%
Getting started	54%
Addictive qualities	41%
Value for money	58%
Overall	**53%**



Snails keep uncovering the paintwork in Decor Wreckers – a game that could be described as a battle between chemistry and etymology...



60 jolly aliens to zap in Zapper.

ZAPPER

Producer: **Anco Software**
Memory required: **48K**
Retail price: **£2.99**
Language: **machine code**
Author: **Richard Wright**

As its name implies, *Zapper* is a simple alien zapping game, a sort of 'Galaxian' on its side. Your laser base sits on the left of the screen and can move vertically. 60 attack waves of aliens zig-zag towards you and any 'landing' on your base axis will result in a loss of one life. There are 12 aliens in each attack wave, and before each wave the sprite is blown up enormously (like something out of H.U.R.G.) so you can see what it is. Each attack wave features its own animated alien.

As you shoot them, and the screen has to handle less graphics, they speed up considerably, making the last few quite hard to hit. There really isn't any more to it than that.

CRITICISM

● 'The idea of this game is very, very simple – just zap the aliens. Easy? Well the aliens do speed up to make life more difficult. They are very well animated and detailed, there's a good choice of colour which also helps to show up the detail. Keyboard play is very easy and responsive from well laid out keys. One of the addictive things about this game is that you just want to see what the next wave of aliens will be like. Otherwise *Zapper* isn't really very addictive. Overall, a good, brainless zap em up game.'

● *'You can't actually say all that much about Zapper! I mean it is simple. On the other hand, it's rather fun to play and all the aliens are so jolly – I can't think of a better word to describe them! Better played on the keyboard than a joystick as the controls are simple, because there isn't continuous fire, so the fire finger gets a bit tired because of the speed needed. Probably appeal enormously to younger players, especially at the low price.'*

● '*Zapper* is honest, to say the least, for it's nothing more than a mindless shoot em up. It's pretty fast, though, and the graphics are amusing and well done. I can't say it held my attention for very long as there is no content to speak of, but for a while waiting to see what alien will pop up next retains the attention. Fast and rather point-

less, but fun for a while certainly.'

COMMENTS

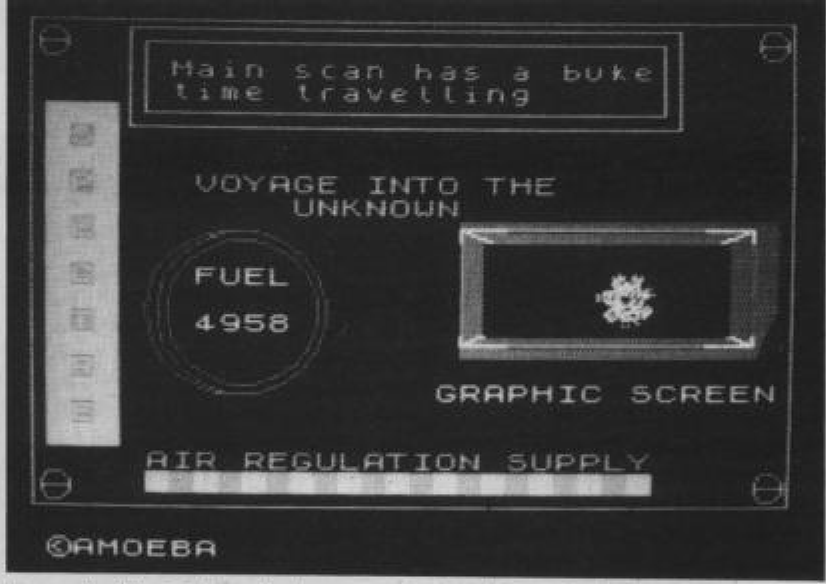
Control keys: Q to T/A to G up/down, H to ENTER for fire
Joystick: hardly needs one, one reviewer using programmable reports that keyboard is better
Keyboard play: sensible positions and responsive
Use of colour: excellent
Graphics: smooth, varying and detailed
Sound: good
Skill levels: 1
Lives: 3
Originality: hardly
General rating: above average fun, lacking content and therefore much addictivity, reasonable price, may suit younger players.

Use of computer	70%
Graphics	59%
Playability	70%
Getting started	65%
Addictive qualities	57%
Value for money	65%
Overall	**64%**

VOYAGE INTO THE UNKNOWN

Producer: **Mastertronic**
Memory required: **48K**
Retail price: **£1.99**
Language: **BASIC**

An issue or two back we received no less than two letters from readers berating us for not having reviewed *Voyage into the Unknown* because it was an exciting adventure. So, here's the review. The very inadequate blurb on the inlay states that your basic objective is to take off from a desolated earth in a spaceship you have found (you don't know much about them) and search the universe for a special crystal which will destroy the Death Star. Movement of the spaceship is controlled by the cursor keys. Additionally you have an on-board laser, a personal laser for those little moments when you are not on board and a remote robot grab arm for when you teleport down to the surface of some planets. Beyond this, there are no instructions on play.



Beam up the buke, Scotty, and make sure you don't turn it into a bile of buke.

It isn't an adventure in the traditional sense. A graphic display shows you some details of your ship controls, fuel remaining, a scanner for shooting enemy ships, a message display which tells you what's around you. Some of the messages are totally incomprehensible. In keeping with telling you nothing at all, at the start of the game it is a mystery how to take off in the spaceship. It is included vaguely in the blurb, Engines, Power, Ignition – yes, that's E, P, I and away you go, on your quest for the special crystal.

CRITICISM

● 'This game sounded quite good with a fairly straightforward idea behind it – just find the crystal, it said. I tried... I tried... and I tried. All I got was to be sucked into black holes and out through the other ends, landing on wierd planets where I couldn't do anything at all, fighting off enemy ships that appeared for a blink on the screen and then disappeared, killing me off in the process. Playability-wise, this game scores zero. You have no control really over the game. A total mess.'

● *'Can anyone tell me what a* ***'buke'*** *is? Please, PLEASE, it's been driving me crazy for days. Please, Derek Brewster, can you help? I've heard of a rebuke, but a buke has me stumped. This game seems to be full of silly jargon like 'Time Warp Chuck Out' which sound a bit like closing time at the local. It's also full of planets on which the player appears to be able to do nothing and go nowhere. I must say, that I have never seen such an utterly stupid program before. Meanwhile, on my scanner, I can see another buke spinning round. Please – someone...'*

● 'It seemed to me that a major part of the program was damaged on take off. Because unless I've missed the point entirely, I found *Voyage into the Unknown* to be exactly that – completely unknown. The actual playing area provided in this game is tiny, especially considering the 48K available. Perhaps that's what you get for £1.99, but really isn't good enough. In my opinion, this is a total waste of time and I wouldn't even both rating it.'

COMMENTS

Control keys: Cursor, 0 to fire, Robot controlled with K, L and W, F fires personal laser
Joystick: cursor type
Keyboard play: if anything, over-responsive
Use of colour: poor
Graphics: very poor
Sound: there isn't any
Skill levels: 1
General rating: a waste of money

Use of computer	20%
Graphics	25%
Playability	2%
Getting started	2%
Addictive qualities	0%
Value for money	2%
Overall	**9%**

FORMULA ONE

Producer: **Spirit Software**
Memory required: **16K or 48K**
Retail price: **£8.95**
Language: **machine code**

Well, after months of speculation and rumours the road racing game with the famous steering wheel has arrived. Quite how, we don't know, since last heard of, the police were investigating the company because of customers' mail order money going missing and the game's non-arrival.

The cassette includes two versions, a 16K and a 48K version, to suit either type of machine. The inlay claims that the game is based on current formula one levels of braking and road holding. The 48K version gives you a choice of ten tracks; Hockenheim, Osterreichring, Kyalami, Zolder, Paul Richard, Monza, Zandvoort, Silverstone, Brands Hatch and Monaco. These are selected from the front end menu, each track with its name appearing on a key press one after the other.

The screen display is not unlike that of Psion's *Chequered Flag*. You are seated in your car, your hands seen on the steering wheel. The road is white, seen in perspective against the green grass and blue skyline. Movement is indicated by the small signs on the side of the road, but there is no moving background as in other versions.

What makes *Formula One* different to all other road racer games is the much vaunted steering wheel which comes with the game. This is a yellow plastic device, shaped rather like the top of a big pickle jar,

A chance to raise your spirits in Formula One with its Chequered Flag look-alike graphics.



and was promptly nicknamed the Yellow Ashtray in the CRASH offices. It is designed to fit neatly on the Spectrum in such a way that it can be rolled left or right along the top row of keys. These are designed to proportionately increase left or right turn. There is an option for automatic or manual gear change.

CRITICISM

● 'I'd understood both from the ad and from the publicity since, that the 'delay' in this game was due to faulty mouldings for the steering wheel. So one might have expected something special, perhaps (is it possible) an add-on at a price of nearly £9. But perhaps that's asking too much. In the event, the flimsy plastic lid you actually get is a gimmick hardly worth having and certainly not worth paying for. In addition, the left/right keys (all the top row) are designed to proportionately increase the turning movement, so they are less effective for simple keyboard use. The 3D works quite well, but the car graphics are not a patch on *Chequered Flag*, which they resemble, as nothing in the car is animated at all. Not such a bad program, hardly a good game.'

● *'You may have felt ripped off by not receiving this game had you ordered it, but you may still be ripped off by getting it. With the game came a free ashtray for hours of frustration. With ten tracks you can have a choice of disastrous driving. 3D graphics are very effective with the signposts whizzing past either side of the track, although I haven't found out yet what their usefulness is, apart from indicating that the 3D is actually working. The idea of having proportional keys is a very good one, but doesn't work well with this game. The actual key response is appalling and would seem to have been faster if written in BASIC, with a delay or two to three seconds after pressing a key. Response time totally spoils the playability of the game and that, of course, makes it completely unaddictive.'*

● 'The game looks good but does not play the same way – in fact you might say NO WAY. It's not possible to guide this vehicle around the tracks provided. The actual car looks unprofessionally drawn and I would have thought it would have been possible to make the wheels look as though they were going round as there is no other way of seeing movement at first until you gain enough speed to see the marker posts sliding by. The track also seems to go on forever, at least it does at the average speed of 30mph, which is about all you can safely do when the wheels apparently don't take you where you think you're steering. I've yet to find out whether there are other cars in this game, as the inlay suggests, because I've never been able to qualify yet, and I'm not sure I can be bothered to try again.'

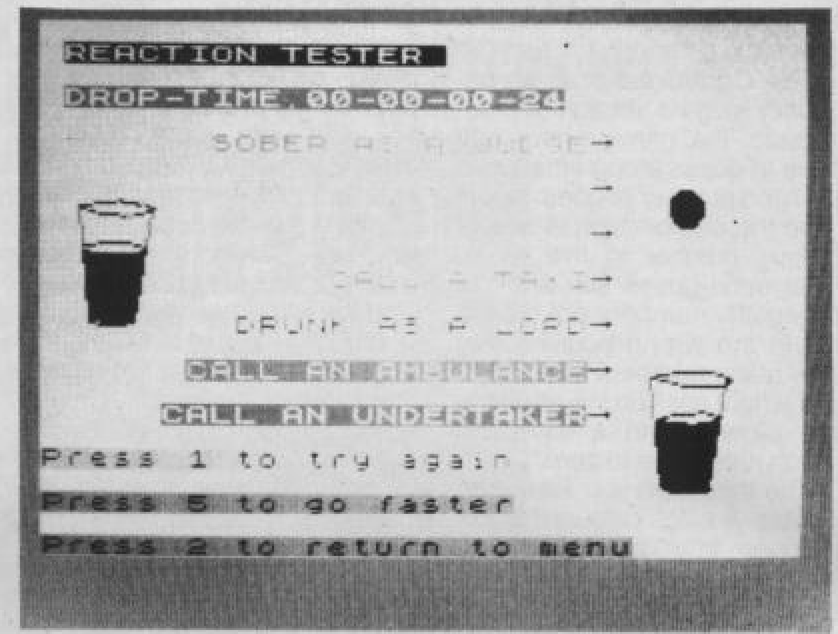
COMMENTS

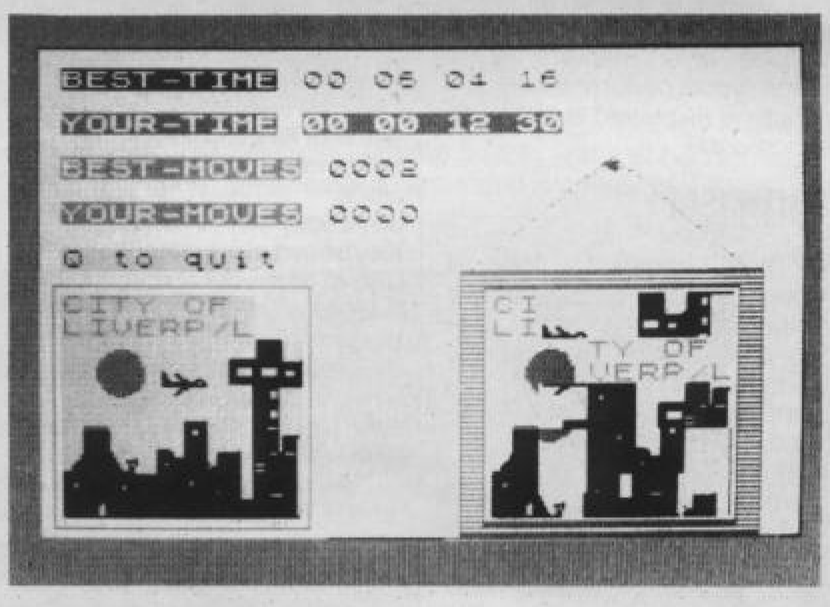
Control keys: Accelerate = z, Brake = CAPS SHIFT, change up = S, change down = A, to steer use all top row
Joystick: the yellow ashtray
Keyboard play: steering keys are highly unresponsive
Use of colour: good
Graphics: 3D effect works quite well, overall less than standard graphics
Sound: below average
Skill levels: 1
Screens: 10 tracks (48K version)
Originality: well the road racer is hardly original, but the steering wheel is, on the other hand, it doesn't work very well and is a laugh
General rating: a barely average looking 3D race game with built-in unplayability.

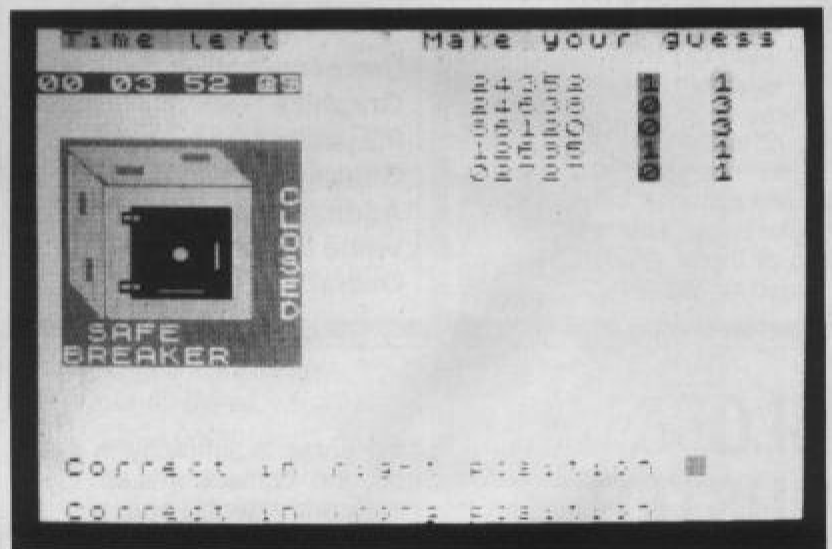
Use of computer	20%
Graphics	64%
Playability	15%
Getting started	42%
Addictive qualities	5%
Value for money	2%
Overall	**25%**

RAINY DAY

Producer: **C.C.S.**
Memory required: **48K**
Retail price: **£2.99**
Language: **machine code**
Author: **Roy Pool & Terry Murray**







The three screens of Rainy Day, (top) the reaction tester, (middle) rearranging Liverpool in the puzzle unit, (bottom) trying to open the safe in the code breaker.

Last month we announced in the News Input of CRASH that C.C.S. were launching a range of new low-price games under the sub-heading of Charlie Charlie Sugar software. *Rainy Day*, is rather aptly named, a collection of puzzle games to while away the dull rainy days. Fate decreed a hot summer – never mind!

There are three different types of game included, each accessible from the front end of the program. **The Puzzle** unit offers you the choice of ten small pictures which must be sorted out. The complete picture is shown on the left of the screen, whilst on the right it is shown with all its character blocks muddled up. A yellow cursor block acts as a shuffling space so you can move the picture blocks about to rearrange them. The time it takes and the number of moves you make are soon shown on screen along with best times and best moves. The cursor block is moved appropriately

enough with the cursor keys or a joystick.

The Codebreaker is an unusually elegant version of Mastercode, the game where you have to guess a combination in a limited number of goes. In this case the combination is a safe locking number in five digits. After each guess you are told how many numbers are correct but in the wrong position and how many numbers are correct in the right position. 15 attempts are allowed and a time limit which runs down to zero.

The third item is a **Reaction Tester**. A black coloured ball is dropped from the top of the screen into a glass of liquid. The object is to interrupt with a key as fast as possible so that the ball hardly drops at all. Witty comments are attached to the various level markers which judge your performance. The droptime displayed is in 1/100s of a second.

CRITICISM

● 'Three games in one, I thought, can't be good. Well two of the three aren't bad at all – this is for puzzle type games. Codebreaker is a non-complicated version of Mastermind types and I found this worked quite well. Finding the correct code will open the safe and play a tune. I found the Puzzle Unit very difficult to complete, perhaps it would have been easier if a group of people tried to solve it – good for families. I thought the Reaction Tester was a bit pointless, but it makes a little break between the others. In this trio of games, colour has been well used but sound is only a frill and doesn't make any difference to the playing of them. *Rainy Day* is well priced for its contents.'

● *'The playing appeal of games like these is pretty limited, although the two main puzzles will probably find families with very young children enjoying them as a group participation. Neither the picture shuffling nor the code breaking is new* – Corridors of Gennon *incorporated the code element and we've seen other compilation games with it, but I thought this version was well presented if graphically unexciting. On the whole reasonable value for money, but not generally recommended unless you particularly enjoy puzzles.'*

COMMENTS

Control keys: cursors, Q to return to menu, 9 to swap a piece
Joystick: AGF, Protek ZX 1
Keyboard play: reasonable
Use of colour: well used
Graphics: average
Sound: limited
Skill levels: 1
Originality: all ingredients seen before in various forms
General rating: reasonable value for money, hardly an addictive sort of game, probably good for families and younger children.

Use of computer	60%
Graphics	55%
Playability	66%
Getting started	67%
Addictive qualities	69%
Value for money	72%
Overall	**65%**

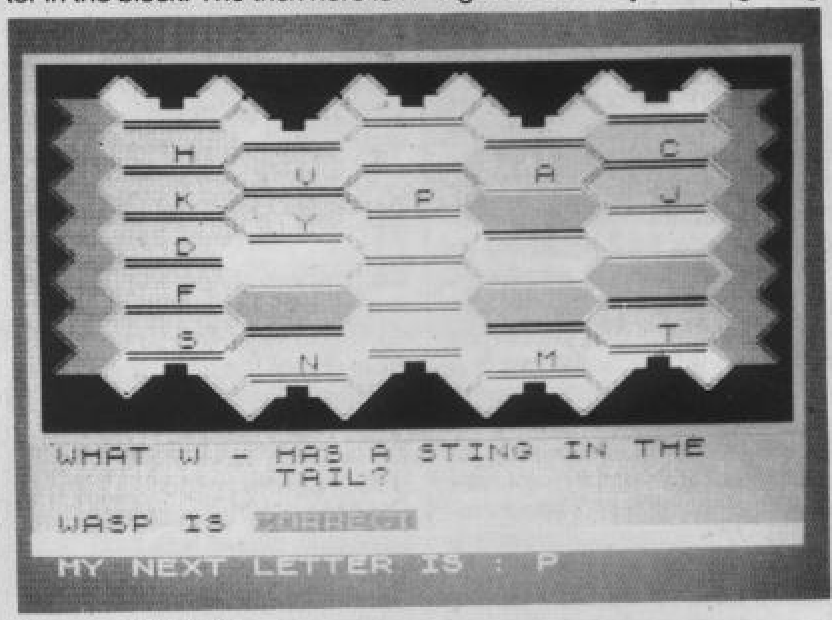
BLOCK-BUSTER

Producer: **Compusound**
Memory required: **48K**
Retail price: **£5.95**
Language: **machine code**

Blockbuster is a computer version of the TV game, and it's a good one too. A game to test general knowledge, spelling and speed of recall which may be played by one player against the computer or between two players. The general object of the game is simplicity in itself, but the content makes for a lively and playable one.

The screen is broken up into 25 six-sided blocks, interleaved like a honeycomb, so that there are five vertical columns of five blocks. The blocks are coloured yellow and the object is for the player (or player 1) to make a linked bridge from left to right or vice versa, while the computer (or player 2) does the same vertically. Player 1 makes the blocks turn blue with a correct answer and player 2 turns them white.

At the start of a game the players are asked their names and the skill level desired (1 to 9). Then the blocks appear with the central one being 'free'. Randomly chosen letters appear in the rest. The first player then chooses which block he wishes to conquer and a question appears below the screen asking the player to identify and spell out whatever word the computer chooses which begins with the initial letter in the block. The trick here is that the question is open to both players (or the computer), with player 1 using left hand keys to interrupt and player 2 using the right hand keys. It is possible to interrupt before the question is complete. An incorrect answer will award the block to the player's opponent, and the first to complete their bridge across the screen wins.



The screen of Blockbuster.

CRITICISM

● 'If you didn't enjoy the TV quiz show, then you probably won't enjoy this computer version. But if, like me, you did enjoy the TV show, then there's a good chance that this will appeal. The nine skill levels should suit most players and the large-sized cassette box comes with a supplementary questions tape when you run the main loader out of questions. All in all a good package.'

● *'This is a very good translation of the TV programme. The game has several large databases providing loads of words and answers. Having skill levels is a great boon to the player if just playing against the computer – this effectively slows the computer's thinking process allowing for a single person to build up his or her skill factor. Colour and sound (sound can be switched on or off) is well used and makes the game more playable. Overall a great game for one or two players and can be recommended as a family game.'*

● '*Blockbuster* is an educational type of game that, because of the way it is played, is very entertaining. If you're playing on your own, it's quite fun to see the computer leaping in to make a guess before you and getting it wrong. Obviously the program hots up as the skill levels increase and the computer gets more intelligent. I enjoyed it, and although this is definitely not a game where addictivity really enters, I'm sure it will appeal generally to lots of people who want something to put on in the evenings when *Blockbuster* isn't on the telly!'

COMMENTS

Control keys: very simple
Joystick: N/A
Use of colour: simple and effective
Graphics: Spectrum text on simple colour clocks with a time bar at the base
Sound: switchable, useful entry beeps and simple tunes
Skill levels: 9
Originality: hardly matters in this case
General rating: interesting, entertaining and overall, good.

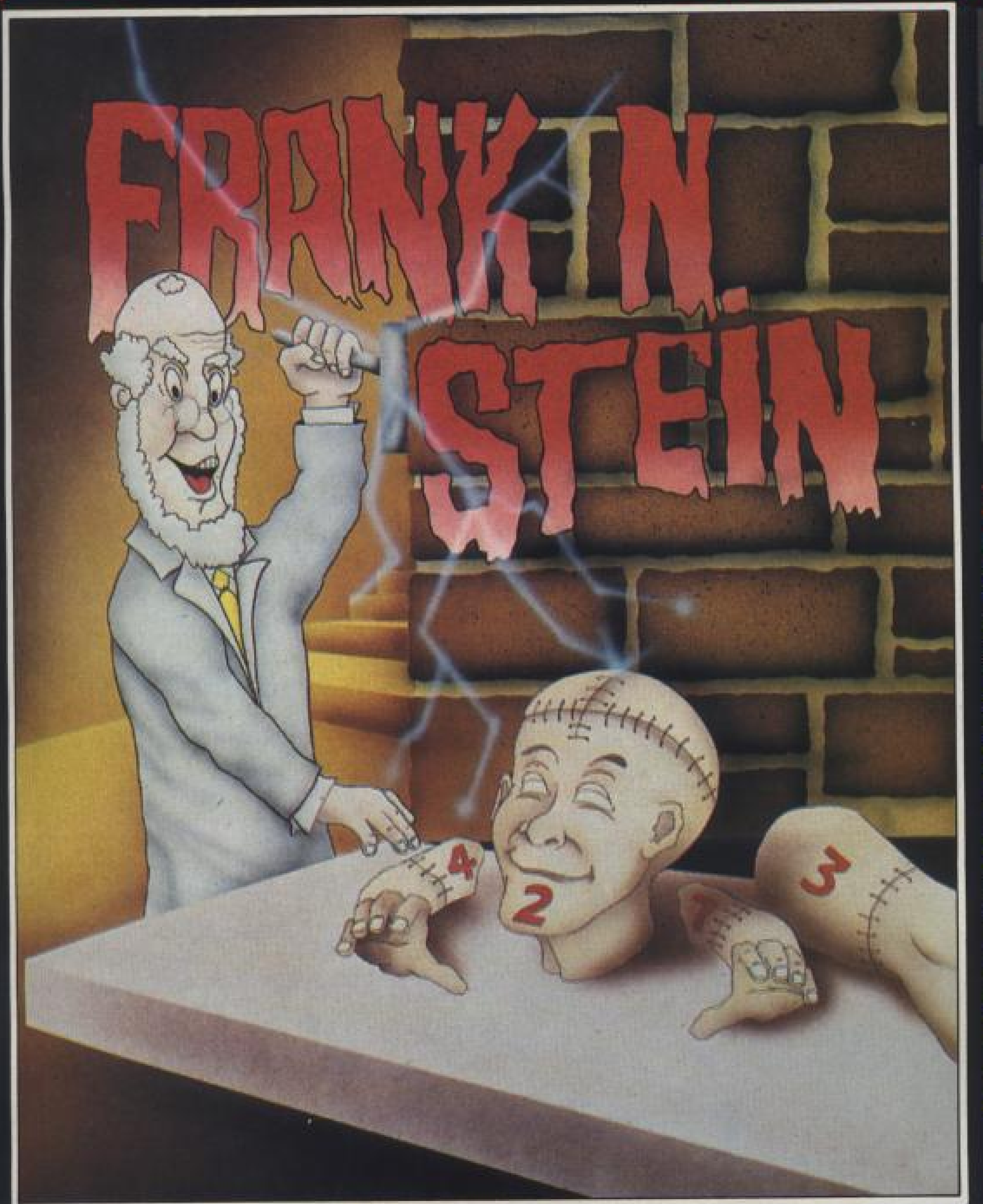
Use of computer	71%
Graphics	N/A
Playability	76%
Getting started	77%
Addictive qualities	N/A
Value for money	78%
Overall	**76%**

Have you got what it takes to build your very own monster?

NEW RELEASE AVAILABLE NOW

FRANK N. STEIN

BY COLIN STEWART





Ballad of Frank N. Stein

Frank picks up a head,
A chest, some arms and legs,
He takes them to his tower
and adds a shot of power.

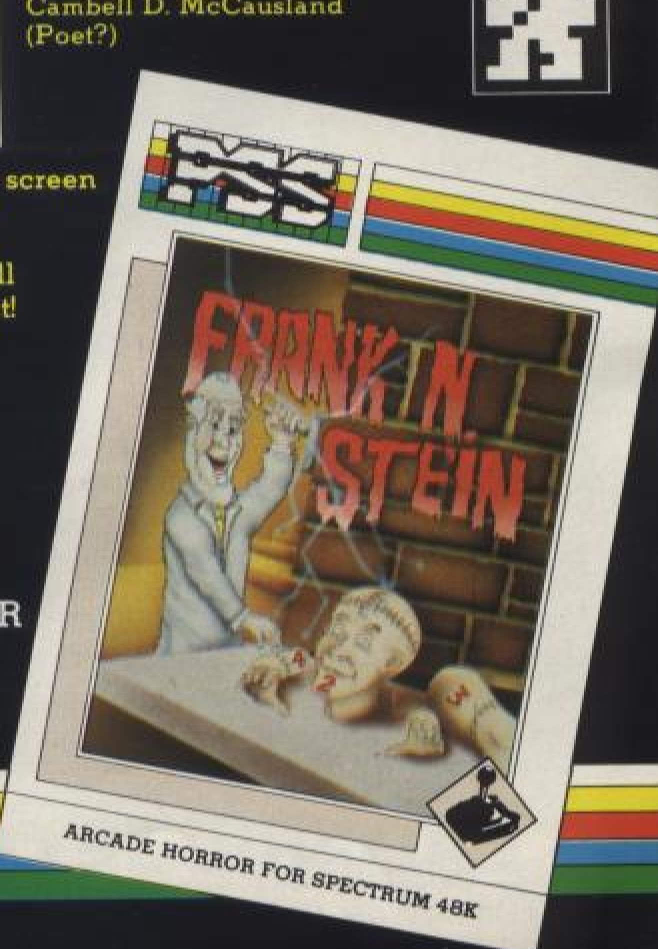
Frank must now be berated,
Just look what he's created!
A monster big and mad
The outcome must be bad.

Frank's monster's playin rough,
Throwin all kinds o'stuff!
If Frank can't reach that handle
he won't be worth a candle.

Phew! That's got the power off,
but Franks out of his box!
He's found another brain,
and he's going for it again!

Cambell D. McCausland
(Poet?)





THE SETTING: Professor F.N. Stein's laboratory in his Castle in the Black Forest.
THE TIME: 1884
THE GAME: 50 Screens requiring timing, logic and planning to complete.
THE OPPOSITION: Too many to list here but featuring:- Snails, bats, ice (it makes you slip), firemen's poles, man eating pumpkins, spiders, slime (it slows you down), caterpillars, tanks, springs, light bulbs (they electrocute you), mice, lobsters, snakes, bumble bees, jack-in-the-box etc.
THE OBJECT: As you know, all the best monsters are hand built. Prof. Stein's life long ambition has always been to build his own monster - but first he needs all the bits!
You guide him around the dungeon picking up the bones - make sure you get the right order - then activate him by throwing the switch - the longer you take to complete each screen the higher will be the charge you give him - and the angrier he will become - so watch out!

£5·95
ARCADE HORROR
FOR
SPECTRUM 48K

PSS

P.S.S. 452 STONEY STANTON RD. COVENTRY CV6 5DG.
TEL: COVENTRY (0203) 667556

Play the game right...

...with the *Intelligent* Joystick Interface from Cambridge Computing!



Also available from **John Menzies**

Interface Easy to program ● 1K on board memory ● Own rear edge connector ● Compatible with all standard joysticks ● Now Microdrive compatible

Joystick Self centring ● 8 directional microswitched action ● 2 independent fire buttons ● Standard 9 pin D connector

Tape Easy to use program enables the interface to work on **ALL** software ● Keeps a record of all your games — so you only need to program it for each game once!

CAMBRIDGE COMPUTING

1 Ditton Walk, Cambridge CB5 8QZ Telephone 0223-214451

Ring us now for details of your nearest stockist.

CRA

Please send me:

Joystick, Interface and Tape at £29.95 ____

Interface and Tape at £22.95 ____

Joystick only at £7.00 ____

I enclose cheque/p.o. for £____ made payable to Cambridge Computing

Name____

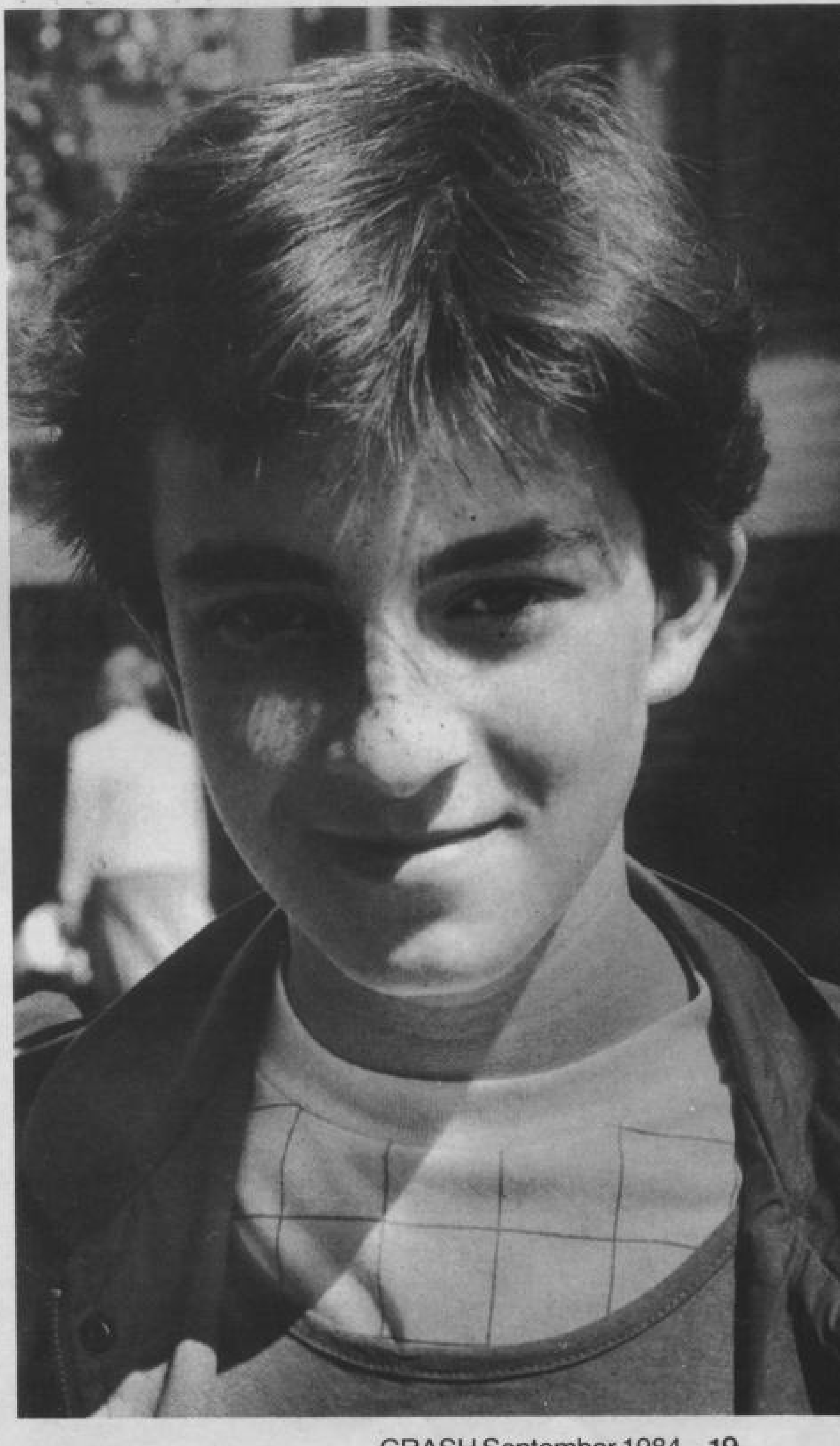
Address____

Please allow up to 28 days for delivery

"I'm not a star. I don't think so anyway. I still go round anonymous through the playground."

THE VIRGIN SORCERER

The games software industry has long thrived on stories of teenage programmers. **DAVID WESTERN** travelled to the dusty streets of London's Portobello Road to meet one of the youngest, 15-year-old **MARTIN WHEELER**, who has written two of VIRGIN GAMES' most successful Spectrum games, **DR FRANKY** and **SCORCERY**.



The interview took place on June 29 at Virgin Games' office in the Portobello Road, West London. At the time Martin was still 14. He hails from Reading where he attends Meadway Comprehensive School. David Western's questions are shown in bold text and Martyn's replies in normal text.

When did you start with the computer?

When the ZX81 came out, when was that? Anyway, six months after it came out – 1980/81, around then. I got a ZX81. Sitting around the old black and white telly!

Did you do any programming at school – do they have computers at school?

Yes they do, but because I wasn't in a high enough maths group, they didn't let me into the Computer Studies group. So I was a bit cheesed off about that. You have to be in the two top groups and I was in the third one down. But then again, my friend was in the third one and he got in just because he flukily passed the exam.

You're in the Computer Studies group now I presume?

(*Laughs*) No. I'm still excluded.

But do they know at school that you have written two games for Virgin?

Yeah, they know that.

How do your friends react to you?

I think they're all pretty astonished.

What sort of computers do they have at the school?

Loads of BBCs like most schools do, and they've got two VIC 20s, I think. Pretty redundant I should think. I don't know what else they've got because I haven't been in the computer room much.

THE VIRGIN SORCERER

> "I saw an advertisement in a mag – 'I want to be rich and famous department!' I thought, oh great, I'll send my game up."

And what do your friends think of your success – are you a star at school?

No, not really, I'm not a star. I don't think so anyway. I still go round anonymous through the playground – kids don't know who I am. My success is confined to a small group of friends both inside and outside of school.

So did you teach yourself?

Yes, with the old ZX81 manual. I had the ZX81 for about a year and then I went onto the Spectrum. I got a 16K Spectrum at first. I did have a 16k RAMpack on the ZX81 and I thought that was plenty. But when you get to the Spectrum it all seems to go away and you want a 48K, don't you.

Did you start to learn programming straight away?

Yes, it was my main interest, and there weren't many ZX81 games anyway, and the ones there were, were few and far between, so I was programming all the while. Started off out of magazines, copying other people's programs from the listings, then you start to write your own.

How did you come to join Virgin?

Oh well, I saw an advertisement in a mag – 'I want to be rich and famous department!' I thought, oh great, I'll send my game up. I had a few turned down though. It was ages ago – I sent them off a BASIC game first, then I moved onto the compiler and they gradually got better. And then I sent of *Franky*. I was at a friend's house one night, and my mum rings up and she goes, 'You would have to be at your friend's when the man from Virgin phones!' So I rushed home and she said they want to buy the game. And I was going, 'Yes, yes' and dancing around. Really, it was through that advertisement.

Did they buy it just as you had written it?

They made a few alterations, you see it was compiled from BASIC and I lost the BASIC copy of the game, so it was hard to make any major alterations. I'm actually learning machine code at the moment.

How long did it take you to write *Dr Franky*?

Not too long actually. They say I'm a fast programmer. It took two weeks to write the whole program and then for another week I was changing bits – you know – a brick here, a brick there.

What made you choose that particular idea?

I became influenced by something on telly – you see something and you think, ah, that could be good as a game, and then you start to work something out. *Dr Franky* was originally going to be a sort of looking down game, a bit like *Atic Atac* where you look down on a room, and it was going to be a maze game. I changed it to have levels.

Now what about *Sorcery*, which is something different. How soon did that come after *Franky*?

It was Christmas Day that I started *Sorcery*. First of all what I did was draw a picture of a wizard, flying all over the landscape with mist and trees – you know, the *Sorcery* title page – that's how the picture actually looked. I did the title page first, believe it or not. I always like that because it gives you a sense of having done something.

Funnily enough, some of the games I do, I make them up as I go along, because I find that instead of sitting down and writig out exactly what's going to happen, you can experiment on the computer by saying, oh move it this way – and then you try moving it that way and you can experiment by making graphics. The graphics I've done on my games are simply done on the Horizons Character Generator.



So it's a fairly organic process?

Yes.

And how long did that take?

A bit longer than *Franky*. About three or four weeks. There was a bit of a problem with the INKEY$ because I was using the IN command to read the keyboard and there was a muck up with the different issues of the Spectrum and I was having to put in IN values. I had the same problem with *Franky*. In fact, if you find that *Franky* has a problem jumping, it's best to pull the EAR socket out. And on *Sorcery*.

If you want another tip, something nobody knows, if you actually do *Sorcery* and get to the end, the next round it will be a different weapon you need. But if you fail that time you go back to the original weapon.

There's just the two choices?

No, it goes on for quite a while.

Do you have a contract with Virgin Games?

Yes, I do.

And what do your family think about it all? What family have you got?

It's hard to tell what they think. There's just my mother and father, yes the only child – story of the only child! They are encouraging me – secretly I think they're very pleased. But they don't seem to show it much! My mum still nags at me for not clearing up my bedroom and stuff like that.

This is a cheeky question. Are you making a lot of money?

Well I don't know because I don't know anyone else who makes games so I don't know whether it's a lot of money or not. Er, a substantial amount, you know. I'm pretty pleased anyway. I get paid and I get a percentage.

Well, here you are, an established programmer for a large software house, but do you play other programmer's games?

Yes I do play games. I've got quite a collection. I like the Ultimate ones, dare I say it! *Sabre Wulf*, I really like that. I've just done it in fact, and I've made a map.

I like Ultimate's games very much because they're all so professional, they follow a sort of pattern and all start off with the same sort of presentation. But the graphics are smooth and good. There are some other companies – Melbourne House. I like those quite a lot, adventues like *The Hobbit* and so on.

Have you used any of their utilities, like Melbourne Draw?

No. My screen drawing program was done with a very simple screen kit program that anyone could write really – just moving a cursor around the screen. I do the whole picture in big character square blocks and then I etch it out with a cutting pixel, as I call it. It rubs out blocks, you know, leaving a smooth edge for the drawing and then I print the colours.

Do you ever play on the arcade machines?

Yeah, I do. Favourite ones? *Zaxxon, Xevious* (I really like that one). But I haven't been in the arcade recently. Haven't seen anything new like *Dragon's Lair*.

What about adventure games?

The Hobbit, I love *The Hobbit*, still I haven't done it yet. Close though, getting closer. I've killed the dragon and shot Bard with his own bow and arrow.

Would you like to write adventures?

I don't know, I was writing one at one time and it went wrong so I thought, oh hell! I couldn't get out of this problem, that's why I pulled the plug out, and as soon as I pulled it out I thought, oh I could've done that! That would solve the problem. Uuurrgh! But I thought, I can't tackle all that again!

What are you working on at the moment?

I did have a program, in fact I've still got it on tape somewhere. It's about this fellow running through the streets with a gun. I don't know whether you've seen *Blade Runner*. Pretty similar to that with dark streets and a man shooting the bad guys. This man is out hunting some evil being. That's about all I've been working on as far as programming goes. A few other ideas I've churned out and then throught, no, I couldn't start.

But I understand that you're working on a board game. We've all seen the ads Virgin have put out about their new venture into board games. Are you doing it for them?

Yeah. I'm working on this board game with Andrew, he's my friend. And we're hoping to have some success with it. It's a fantasy, fighting board game where you have two opposing sides, supposedly in conflict over this mystical land, each trying to destroy the other. You have various pieces each with their own characters – like there's the cleric who's got his cross and he's very weak and can't beat anyone up; then there's the warlock who can kill just about everybody but he can't swim across rivers and he can't climb mountains, so he's pretty immovable. It's for two players but I suppose you could have two on each side working together, or you could have a third person acting as a referee. It's a versatile board, you can play it longways or sideways.

Virgin seem to produce a very diverse number of things. Are you planning to do anything else within the company?

Virgin's been a very helpful company, so I don't know. At the moment it's the board game. The didn't actually suggest it and they haven't even seen it yet. I'm just unveiling it now, so I'm hoping they're going to like it. I made the game up about six years ago on the back of a cereal packet. I thought it was quite a good idea so I thought I'd do it again professionally on a big board with better pieces.

"I become influenced by something on telly – you see something and you think, ah, that could be good as a game."

Let's move back to computer games again. What do you think about software piracy?

Well obviously it's doing some sort of damage to the industry, but then again, I get the sort of feeling that kids say, hah! I think this game's quite good, I think I'll pirate it but I wouldn't buy it anyway. I think they just pirate it because they want a large collection, you know. If they didn't pirate it, I can't imagine them buying it because they probably haven't got the pocket money.

You think the games are too expensive?

Yes, some are. Let's see – *Sabre Wulf's* gone up to £9.95 now. I don't know why Ultimate have suddenly leapt up in their price range. That put me down a bit – I wish they would stick to £5.50. Yeah, I think some games are a bit expensive – I think the price should go down.

Apart from programming, what other things are you interested in?

I like art and as you can see, I've illustrated the board game. I like drawing things like that. In fact before I was on the ZX81 I was drawing cartoon comics. I did a book, it was quite thick, with a cartoon story about these space adventurers blasting off to another planet because they had stolen some gold. I'm doing art at school.

You must have lots of friends of your own age who are games players. Are they going to grow out of playing computer games – is the bubble going to burst?

I don't think so – things like *The Hobbit* are very intellectual. No, you don't grow out of computer games. I can see some software houses going but maybe, like Imagine has done, and games aren't selling as well as they used to, just not so many people buying. From my own experience I can tell you that my friends have stopped buying games quite a lot, and they're only buying very few, ones that get fantastic ratings in magazines or that they've seen in shops. So I don't know whether the slump's going to go down or escalate. And in the end I think more professional software's going to come through with superb graphics. It'll be not so much games as animated adventures.

Do you want to be a part of that?

Yes, I would like to be. I'd like to tackle much more ambitious things.

On your own, or would you be happy to work in a team?

I don't really mind. I do like working on my own though. I get along on my own quite well, you see, being an only child you get used to it. But I wouldn't mind collaborating with other people on things.

How about some general things now. What kind of music do you like?

Let's see. I like the Thompson Twins, Spandau Ballet, Howard Jones, Police – an endless list. I don't go to concerts. I haven't had the money until my games were published! But I just buy their tapes.

Any girlfriends, or no time for that?

Yes, well I did have, but they seem to go very quickly, Don't know why maybe because I'm weird or strange or something. Different from everyone else.

What do you think of CRASH? I suppose we'd better have that down on tape!

I think it's a really good magazine. I like it, apart from you got my age wrong. (**We made you 16 I think?**) Yeah, and I'm 15 in July. I did notice on your last cover (June, No. 5) you had a spaceship flying down a canyon of cassettes and I noticed my tape was in there. That pleased me!

I think the reviews are very good, especially the colour photographs, they are really outstanding. Quite large as well, that helps. I think *CRASH* is a very popular magazine. It is amongst my friends anyway. You've got three people doing all the reviews, haven't you? I think that's a very good idea and gives a different view for each game. Well, I really like *CRASH*. I always get it.

What other magazines do you get?

I buy *Your Computer*, but that's too full of adverts. *Computer & Video Games* – I've got quite a few of those and I quite like that, but there's too much about video games and less about computers. I hate program listings and I never type them in anymore. So that's why I like *CRASH* – you can look through and not a listing in sight! And I like magazines that stick to one thing; like *CRASH* is all Spectrum software, so if you see something that really catches your eye, you can think, wow, that's a Spectrum game and not go oh, it's not for my computer.

What about the other programmers who work for Virgin, have you met any of them?

Well I met Andy Green briefly. We were doing a sort of cock up TV interview that went wrong. That was the first TV interview I ever did. We did it on the back of a bus! It was just before *Franky* came out, but it was never shown on telly.

Finally, anything you'd like to say to your fans out there?

Fans! I wish I did have fans. Fans – where are you?

After this you will have fans!

Will I? Well, I've still got four years to go to get Matthew Smith's reputation, haven't I?



"I did notice on your last cover you had a spaceship flying down a canyon of cassettes and I noticed my tape was in there. That pleased me!"

TIR NA

Anyone expecting to be thrust into another 3D space shoot em up in the follow up to *Ad Astra* by **Gargoyle Games** will be in for a shock – on two counts. One; because this is an adventure game, and two; because it possesses some of the most amazing animated graphics you've ever seen on the Spectrum. **Greg Follis** of Gargoyle Games says, 'We like to think of *Tir Na Nog* as being a computer movie.'

And so it is. You play the hero **Cuchulainn**, a figure standing 56 pixels high and animated through no less than 64 separate frames. The result is a very large character who walks, turns and thrusts with his sword in liquid animation as good as a Walt Disney cartoon character could. On top of that, there are many other living creatures in the mythological Celtic game world created in *Tir Na Nog*, and they too are all fully animated and they all move and act independently. To create a sensation of three dimensional depth, parallax movement has been incorporated, so that when Cuchulainn moves the foreground, midground and background all scroll at varying speeds.

Perhaps the most astonishing visual treat can be seen whenever any of the characters walk in front of a detailed graphic like, say, a bush. We are normally so used to some form of colour attribute problem or clashing of drawn edges that it is almost taken for granted that something will go wrong, but that we won't mind too much. Consequently, on first play, it may well go unnoticed that this **doesn't** happen in *Tir Na Nog*. Characters move effortlessly across other graphics or each other without the least disturbance of either graphic.

On screen, *Tir Na Nog* is a richly designed game. It is played in a make-believe land and starts somewhere near the centre of this land. From the first frame all the land can be seen, stretching into the distance. The player must imagine that he is a film camera, which may point in the four directions of the compass – these are the four 'camera angles'. From each angle Cuchulainn will be seen in the centre of screen facing away from the camera, towards it, or facing left or right. He is moved by facing him to the left or right. A series of interlinked paths cross the land along which he walks. Tunnels, caves and secret passages make longer journeys possible. Beyond him the background is also animated as flocks of birds fly to and fro, the trees wave in the breeze and clouds scud across the skies.

The game consists of many sub-quests and typical adventure problems to be solved. In addition to the cassette, the large box contains a map of Tir Na Nog, drawn in a style which will be familiar to those who enjoy Lord of The Rings or the Thomas Covenant trilogy of books. There is also a booklet explaining the game and its objectives as well as providing a detailed history of the fall of the Sidhe and the breaking of the Seal of Calum. It is the re-uniting of the four parts of the Seal which forms the main quest in *Tir Na Nog*. This is the work of a hero, and Cuchulainn looks tough enough to be up to the job. In the first locations you will soon encounter the Sidhe, once mighty warriors and protectors of the Seal of Calum, now shrunk with the destruction of the Seal to petty and annoying creatures. It is the Sidhe who may want to make you look for a sword with which to defend yourself. Cuchulainn is allowed to carry up to four objects at a time and there are some 150 throughout the adventure, so forward planning is required. The carried objects are listed in the information area below the playing screen, and their use is selected from the keyboard and indicated by an asterisk. Once selected, Cuchulainn may thrust with them in what can only be described as a thoroughly athletic manner.

Tir Na Nog is not a game for a few moments, and any suspicion that the highly detailed graphics have been accomplished at the expense of content will soon be dispelled as you set out to defeat the Great Enemy by seeking the fragments of the Seal of Calum. Details of pricing are still uncertain at the time of writing, but it may be around the £9 to £10 mark. I predict, however, that there will be very few who consider it unworthy.

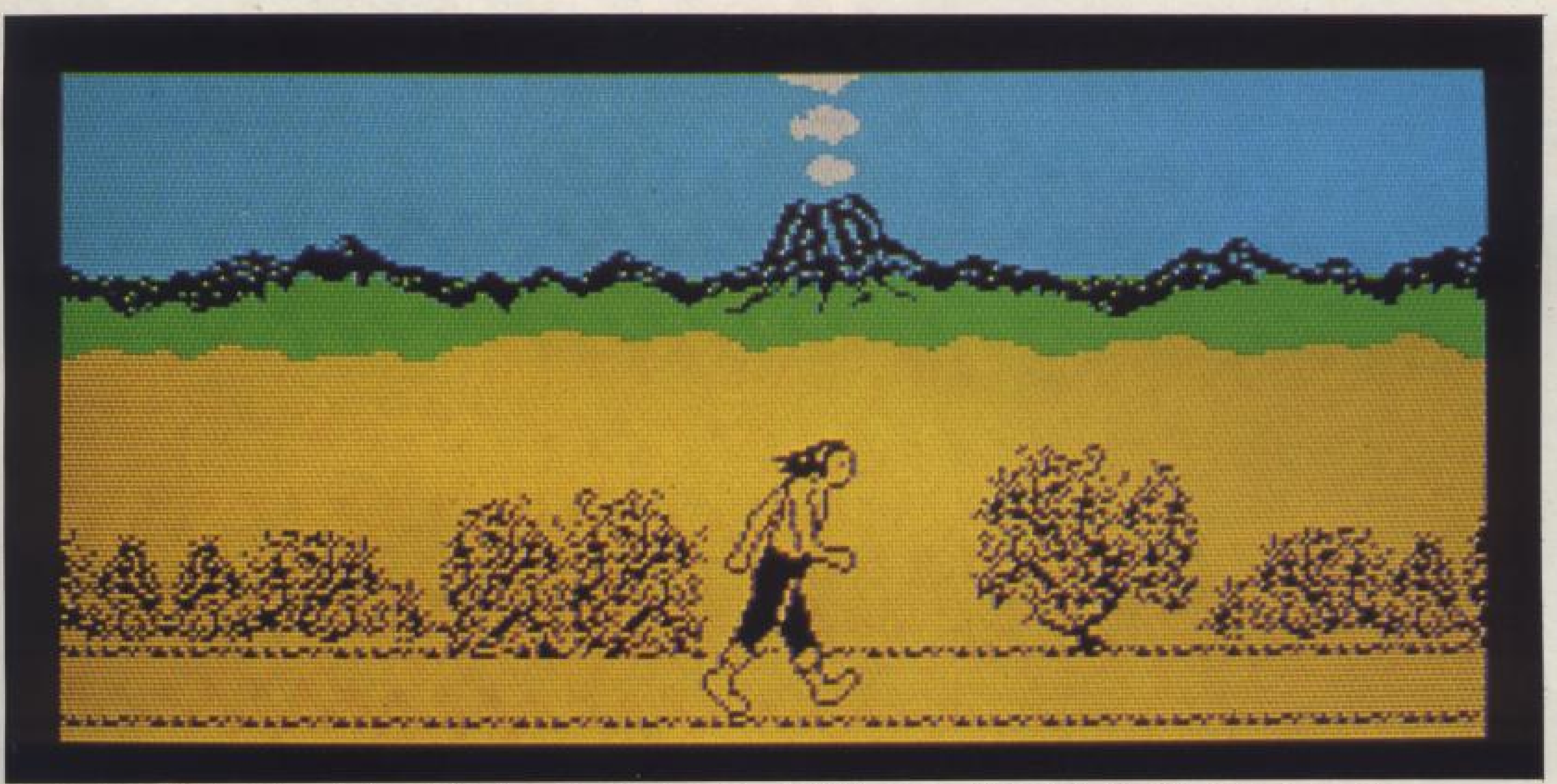
Tir Na Nog is for the 48K Spectrum, written by **Greg Follis** and **Roy Carter** of **Gargoyle Games**.



A rough sketch of the Map of Tir Na Nog, which will be included with the game cassette.

NOG

The Land of Youth



Cuchulainn – the first fully animated computer hero on the Spectrum. Beyond can be seen the smoke belching volcano, which errupts from time to time, feeding the Sea of Fire.

And the Quest of Cuchulainn was this – to bring together the fragments of the Seal of Calum and to reunite them, for the lightening of the burdens of the world and his own lasting glory. So he took himself to the barrow of the Sidhe, and standing before the Altar of the Seal, he gazed upon the gateway to Tir Na Nog…

Sword drawn, Cuchulainn defends himself against a Sidhe.



Under the volcano (Ceardach Calum – Calums Smithy) dwells the Fire Serpent Nathair.

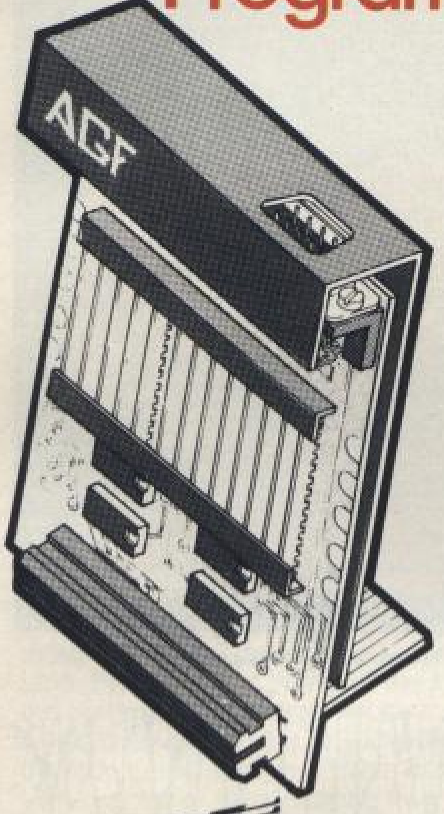


AGF

OFFER CLOSES 30th SEPT. '84
ALL POST-FREE!

SUMMER MAIL ORDER ONLY SAVINGS

Programmable Interface



The AGF Programmable Joystick Interface has established itself over the past year as being the only hardware programmed device that accepts ALL standard joysticks or trackballs – including Quickshot II with 'rapid-fire' – for use with ALL Spectrum or ZX81 software.

The hardware programming method employed by this product has several advantages over similar interfaces that require extra tapes to be loaded or combinations of key presses and movements of the joystick to be made before each game, i.e

- Programming is *not* lost when power is disconnected between games.
- Eight directional control only requires setting of the four normal directions.
- Compatibility guaranteed with ALL key reading methods – machine code and BASIC.
- Several interfaces can be separately programmed for multi-player software.
- Low power four i.c. design allows more expansion.

The programming leads attached to the interface make contact with miniature crocodile clips that give oxidisation free connections every time, unlike plug and socket arrangements, and they don't work loose in constant use.

Keyboard operation is unaffected by this interface and it is guaranteed never to conflict with ANY other add-ons.

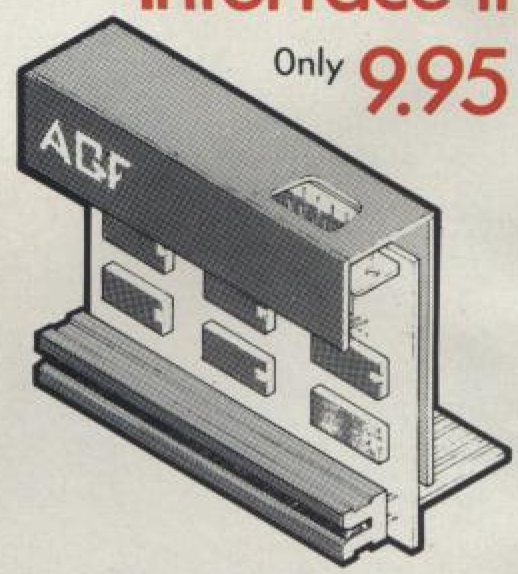
12 month guarantee, key programming chart and a pack of ten Quick Reference Programming cards with full instructions are supplied.

21.95

~~26.95~~ plus £1 post & packing

Interface II

Only **9.95**



Now the AGF Interface II is even better value. Since we pioneered the cursor-key interface in October 1982 there are now over 100 games or utility programs with either the AGF option or cursor key controlled – that makes it unbeatable at this new low price.

Still incorporating the all important rear expansion connector which means other peripherals can be connected at the same time i.e Ram Packs, Printers, Speech Units etc, and of course the key replication principle used guarantees this will never conflict electrically with any other add-ons.

NEW

RomSlot

The new AGF RomSlot has been designed for anyone who already owns a programmable joystick interface, or prefers to use the keyboard to control games, and would like to add the facility of ROM cartridge software to their system.

ROM games are already available from Sinclair and in August five totally new titles are to be released by Parker Video Games – exclusively in ROM format.

The advantages of this new system are instantly loading games that may have required a larger memory capacity if loaded by cassette. The ROM cartridge is actually a dedicated memory device with the program permanently stored in; ready for immediate use.

An extra feature of the AGF RomSlot is the 'Restart' facility. Any program can be instantly re started or conventional machine code games cleared without the need to remove the power.

RomSlot is cased with a full expansion connector for other add ons and is covered by a 12 month guarantee.

8.95

only ~~11.95~~ plus 50p post & packing

Quickshot

7.50

~~8.50~~



Quickshot II

10.95

~~11.95~~



SEND TO (NO STAMP NEEDED): AGF HARDWARE, DEPT. C FREEPOST, BOGNOR REGIS, W. SUSSEX PO22 9BR

Please tick

☐ I enclose a cheque/postal order payable to AGF Hardware for £ ....

☐ Please charge my Access/Barclaycard Account No. ....

Signature .... (Telephone orders (0243) 823337)

FROM: MR/MRS/MISS

ADDRESS:

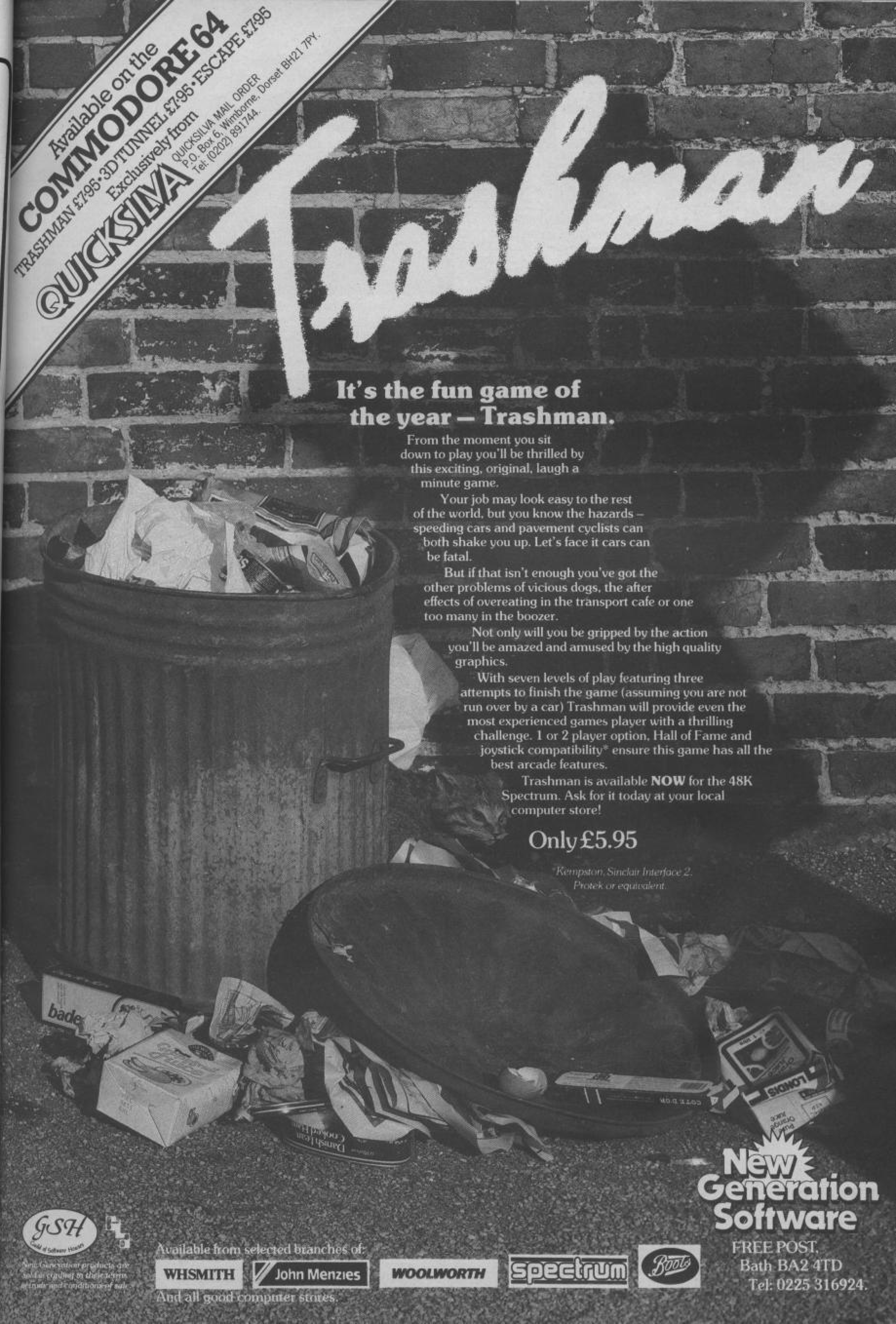
☐ Please send information on ....

Please allow up to 28 days from receipt of your order although we normally despatch from stock within 7 days. All AGF products are guaranteed for 12 months and are supplied on a 14 day money back undertaking. AGF Hardware, Bognor Regis, West Sussex. Telephone: (0243) 823337.

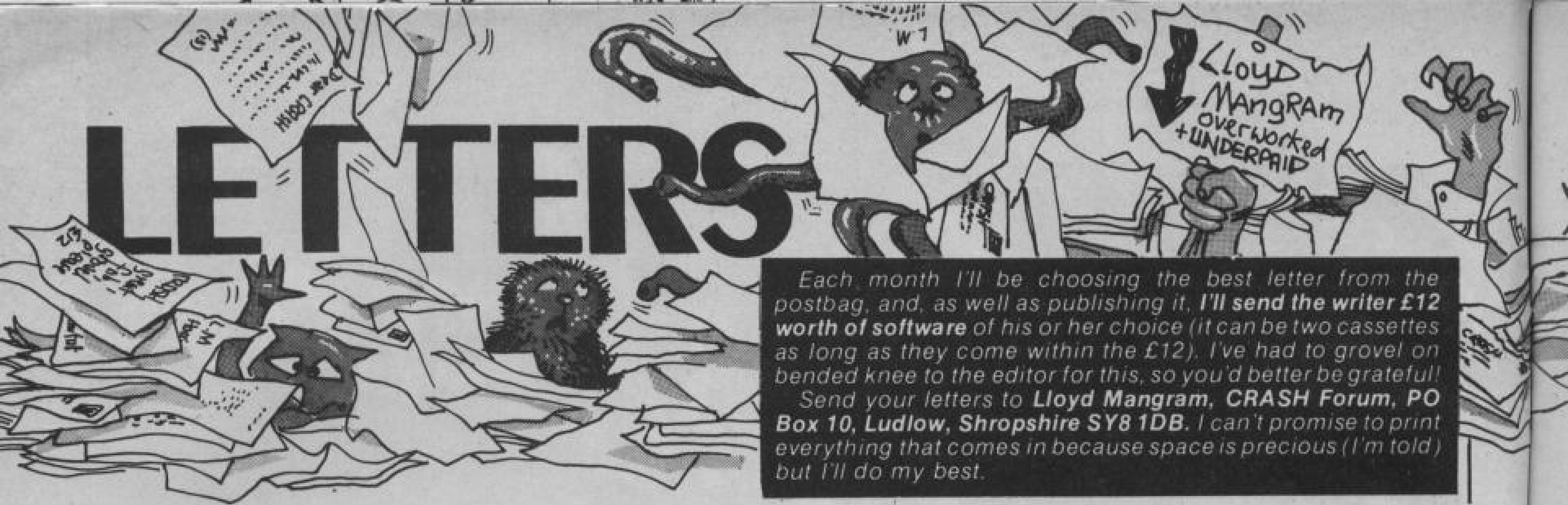
QTY	ITEM	ITEM PRICE	TOTAL
	ZX81 ☐ ZX SPECTRUM ☐ Please tick	FINAL TOTAL	

OVERSEAS PRICES ON APPLICATION

DEALER ENQUIRIES WELCOME


Available on the
COMMODORE 64
TRASHMAN £7.95 · 3D TUNNEL £7.95 · ESCAPE £7.95
Exclusively from
QUICKSILVA
QUICKSILVA MAIL ORDER
P.O. Box 6, Wimborne, Dorset BH21 7PY.
Tel: (0202) 891744.
Trashman
It's the fun game of the year – Trashman.
From the moment you sit down to play you'll be thrilled by this exciting, original, laugh a minute game.
Your job may look easy to the rest of the world, but you know the hazards – speeding cars and pavement cyclists can both shake you up. Let's face it cars can be fatal.
But if that isn't enough you've got the other problems of vicious dogs, the after effects of overeating in the transport cafe or one too many in the boozer.
Not only will you be gripped by the action you'll be amazed and amused by the high quality graphics.
With seven levels of play featuring three attempts to finish the game (assuming you are not run over by a car) Trashman will provide even the most experienced games player with a thrilling challenge. 1 or 2 player option, Hall of Fame and joystick compatibility* ensure this game has all the best arcade features.
Trashman is available NOW for the 48K Spectrum. Ask for it today at your local computer store!
Only £5.95
*Kempston, Sinclair Interface 2, Protek or equivalent.
GSH
Available from selected branches of:
WHSMITH
John Menzies
WOOLWORTH
spectrum
Boots
And all good computer stores.
New Generation Software
FREE POST,
Bath BA2 4TD
Tel: 0225 316924.

LETTERS



Each month I'll be choosing the best letter from the postbag, and, as well as publishing it, ***I'll send the writer £12 worth of software*** *of his or her choice (it can be two cassettes as long as they come within the £12). I've had to grovel on bended knee to the editor for this, so you'd better be grateful!*

Send your letters to ***Lloyd Mangram, CRASH Forum, PO Box 10, Ludlow, Shropshire SY8 1DB.*** *I can't promise to print everything that comes in because space is precious (I'm told) but I'll do my best.*

The latter part of July, when most of the letters printed herein were received, seems to have been rich in a veritable flood of opinions from readers, and thank goodness for it. Once again it's been hard to pick out one letter for merit. (I know I keep saying it, but it is true – honest!) In the event, I thought this one from Anthony Dyson (I hope that's the spelling – the signature was a bit difficult to decipher) with its warning about over-production deserved attention…



TOO MUCH TOO FAST

Dear CRASH,
I read with interest the article by G. G. Watson in July's CRASH, especially when read in conjunction with some of the reviews in the same month.

The strongest point of any computer game, whether arcade, strategy or adventure, has got to be originality, together with its being properly written. At the moment, the market is being flooded with new software weekly, almost daily. Most of it is being pushed out to make a few bob quickly.

With such volume being produced, little time is allocated for ideas and concepts to germinate. No one, for example, would expect a reputable author to produce at the most more than one book a year, or a songwriter more than one album of songs; yet software writers seem to feel the urge to hatch out five or six programs in a year. Are they afraid of not being able to afford the new Ferrari, bigger house and boat? The strain is perceptable in even the bigger software houses. *Jet Set Willy*, for instance, has the notorious bug, plainly remaining in the program because of insufficient time to debug, as well as leaning more heavily than in *Manic Miner* on Monty Python concepts. Whilst *Sabre Wulf* is a replay of *Atic Atac* set in a more open maze with a different scenario.

I'm not knocking either of these two games in particular. They are both very good – but they could perhaps have been even better with more time spent on them, and less repetitious ideas.

The software houses themselves seem subconsciously aware of the problem – witness the plethora of prizes for completing games, cracking puzzles etc, and also more unfortunately, the rise of the unplayable game. There seems to be an unwritten formula, perhaps it could be called the Crash Law, that the less original the game, the greater the unplayability and the price: witness *Cosmic Cruiser* – the customer gets value for money by having a greater opportunity to bang his or her head against a brick wall.

It all boils down to the argument of quality v quantity. Money, it seems, has talked too much in the last eighteen months or so in the software world. The home computer market is still in its infancy – equivalent at present to an eighteen month child (in itself an interesting concept of why computing is popular, but that's a different story) – there are, therefore, plenty of areas to be explored provided the current market is not driven away by boredom. Please can we therefore have a cut down and more respect for the consumer.

Anthony Dyson, East Farleigh, Maidstone, Kent.

PS. You at CRASH could help by being tougher on reviews (unless of course you're afraid of not getting software to review because of it).

To take the last point first, Anthony, we're not afraid of not getting any more software by being tough. At the worst we'll damned well go out and buy it – the reviews might be a bit later though. And to be fair to the software business in general – we have recently given less enthusiastic reviews to follow-up games to a CRASH SMASH when the software house has thought the follow-up to be much better than the earlier, raved over game. That's the way it goes, and so far all of them have accepted it stoically. We think (we may be wrong!) that their attitude reflects the fact that we try to write and encourage players to review in a kind, sympathetic and constructive manner rather than a cynically negative and destructive way. As to being tougher, may I refer you to several letters printed in previous issues which have complained that we shouldn't waste space on reviewing bum games! Of course, we'll carry on reviewing anything we can get our hands on.

As to your earlier main point about the lack of thinking time, I would agree to a point. But if you take the case of Matthew Smith and JSW in particular there is a space of some nine to ten months between Manic Miner *and JSW, in which time Matthew co-wrote* The Birds and the Bees. *Similarly there has been some eight months between* Atic Atac *and* Sabre Wulf, *but there has certainly been a plethora of games from some software houses with often little to judge between them. But don't forget that these games are usually not by the same authors. Let's hope the infant child will grow sturdily and fruitfully. After all, there's a plethora of music and it would be delightful to have a similar situation in the games market as long as a high percentage of the product is worth it.*

LM



Just to show you what an unassuming, generous and humble person I am, I print the next letter with its valued playing tips…

CYNICALLY YOURS

Dear Mr Anagram,
Having just completed level 30 of *MANIC JETKONG 2 (3D)*, I will spoil your enjoyment of the game by telling you that the aliens with the large noses (on level 30) are the last that you'll see as the game ends here.

To make the game astoundingly boring, here is a POKE for unlimited lives:

POKE 327684925,6021/3

In fact, you needn't bother playing the game at all – just press **S** to start, then hold down keys **H,A,R,S** and **C** together, and you will automatically win. Great, isn't it, Mr Anagram? It all helps to make buying the game completely pointless.

(Incidentally, if I win the £12 of software, which I will of course, as I've worked out a POKE for that as well – **POKE Lloyd Anagram** in the eyes if he doesn't give me £12, 73 times – then I'd like *Kosmic Kanga* and *Moon Alert*.)

Next month I'll explain how to bore yourself silly some more. Thanks for a great magazine, Mr Anagram, and I hope your name gets better soon.

Yours cynically, Christopher Sutherland, Inverness, Scotland.

We gave both these POKEs over to one of our reviewers who tried them out. Unfortunately the first requires a game and the second almost hospitalised me (I thank my wisdom for taking the Charles Atlas course so seriously), so as neither POKE works we really can't give you the software of your choice – how's that for cynicism?
LM

JUVENILE

Dear Lloyd,
I have several points to make about your excellent magazine. Firstly, I asked my dad what he thought of my new choice of computer magazine (he likes to know what I'm reading). After spending half an hour reading CRASH he remarked, 'It is rather juvenile, isn't it!'

I thought no more of this until I read Lloyd Mangram's Hall of Slime. I mean it is going a bit far – let's see how much I can pretend to get on *Jetpac*. I'd better choose an obvious figure. Ah! I know! 13,765,920.

Anyway, apart from that, your magazine is amazing. You made *Code Name Mat* a CRASH SMASH. I went out and bought it and lo and behold in the July issue of the CRASH Top 50 *Code Name Mat* is up 30 places to number 6! Thank you, Lloyd (grovel, grovel) for a great magazine.

David Wood, Newick, East Sussex.

I'm shocked! You're supposed to take my Hall of Slime seriously despite its name. I never wanted a Hall of Fame in CRASH but one day He came downstairs and said, 'All the other mags have something like it, it obviously helps sell copies, so we'll have one as well, if you don't mind.' When editors say 'mind' it's an order. I don't know why you all want to show off like this with hi-scores – it's like 'creeping', and creeping things live in slime – hence Hall of Slime. Oh well, perhaps you're right. Sorry Mr Wood (dad), yes we can be juvenile but this month's intake of Slimers is so hefty we'll have to have an annexe to the hall! But, seriously, we can be serious too, and mostly we are. Ludlow has just suffered a small earthquake this morning as I write this, strong enough to shake the building and rattle the computers – and belive me, at the moment I feel very SERIOUS!
LM

BRIGHT LIGHT

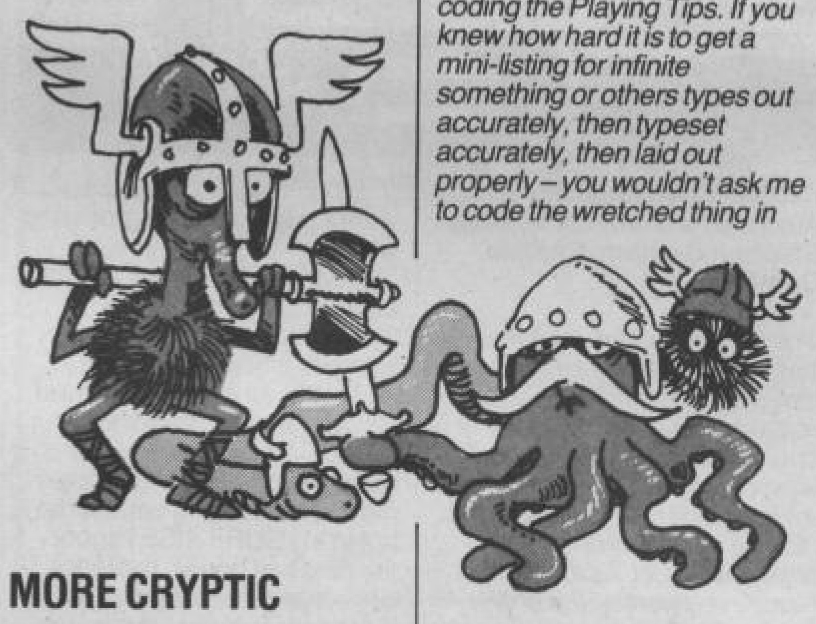
Dear Sir,
I am a fourteen-year-old Swedish boy, and I own a ZX Spectrum. Here in Sweden we have, I think, three computer magazines. None of them is as good as the worst English one. This explains my astonishment when I opened a copy of CRASH. Not even poor Clive's own magazine could match this one by far. Take my word for it, CRASH is the very best magazine of any kind ever seen on this very Earth!

The difference between CRASH and other computer magazines is about the same as the difference between the English and Swedish prices. A 48K Spectrum costs about £240 here in Sweden.

I want to thank all of you who have enlightened the dark world of computer magazines with a brilliant light and a great CRASH!.

Jonas Froberg, Kungsbacka, Sweden.

Well, what can I say? We had more letters in from Sweden…
LM



MORE CRYPTIC

Goddag Mr Mangram,
I would like to congratulate you on your fabulous magazine. However, you've managed to confuse me a great deal. In the early days B.C. (Before CRASH), you were a strictly mail order software firm. But since the magazine came out you have stated on your order form, 'Any of the software reviewed in this issue may be ordered.' But how about all other programs, the games from earlier issues for example? Or do you have all the games in the Spectrum Guide? Or do you have even more games? Please answer this because mail order is the only way for me to get good games.

Now for something totally different. I love your playing tips and 'Signpost' but couldn't you code it or at least make it more cryptic. By just reading the solution out of the magazine as soon as it gets tough makes the games less interesting. But if you coded them people would have to spend a couple of hours solving them.

Another question is, why didn't you keep the 'Next Month' box you had in issue 2?

By the way, I would like to send a 'Hello' to the many Swedish readers, and if they feel like it, drop me a letter.

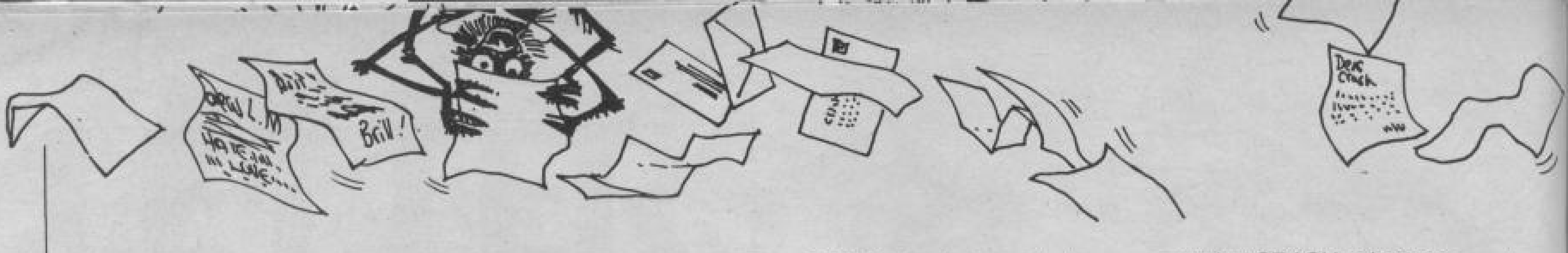
Johan Kallum, Östergatan 1, 211 25 Malmö, Sweden.

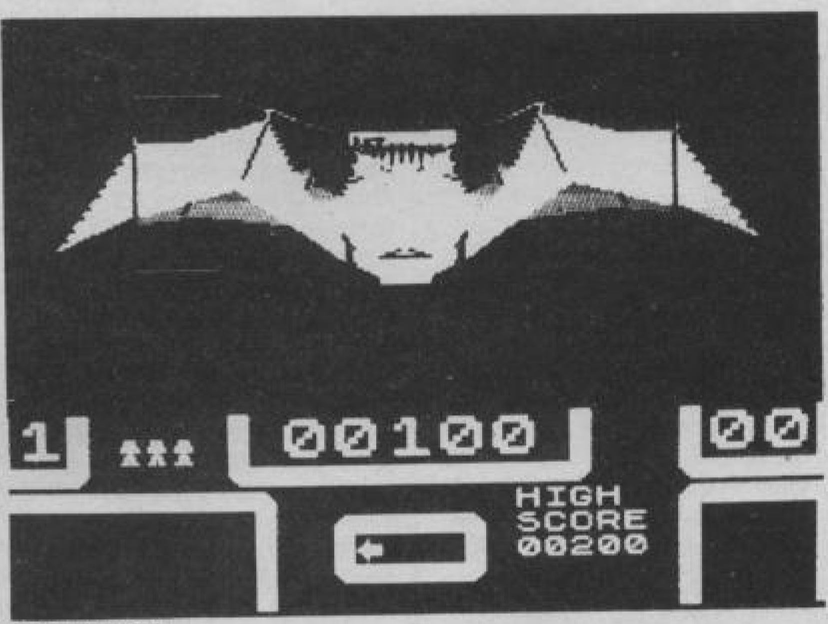
The simple answer to your first question is that CRASH MAIL ORDER can get virtually any Spectrum software you wnt and most titles mentioned in any issue are stocked unless, of course, the manufacturer deletes it – even then, I'm told, we often have some back stocks. Derek Brewster is now using a simple code in Signpost, which probably confuses him more than it does the readers! It confuses me and I would hate to spend the time coding the Playing Tips. If you knew how hard it is to get a mini-listing for infinite something or others types out accurately, then typeset accurately, then laid out properly – you wouldn't ask me to code the wretched thing in the first place! As to the Next Month box, it's there if the art department know what's actually coming next month – but usually they don't as we all work on an issue up to the very last second (I'm not kidding either) before it gets whipped off to Carlisle for printing. The last thing on anyone's mind at the moment is what might happen next month!
LM

IS THIS A CHEAT?

Dear Ed,
I just thought I would let you know that the game *3D Bat Attack* as reviewed in the July issue of CRASH is actually a game featured in an issue of *Your Computer* not so long ago. The point being, is it worth selling a game at £7, as Cheetah Soft are doing, when the game can be programmed in, with little effort, for the price of a magazine? Publishing magazine games is all well and good, especially if you don't like programming in machine code games, but at £6 extra it is just not worth it.

Anyway, I did like the Ultimate cartoon, even though it did not exist in the advertisers index. Hope it continues as it is great and a more interesting way of advertising, like the





3D Bat Attack

Automata crummy comic strips.
Stephen Graham, Carlisle, Cumbria.

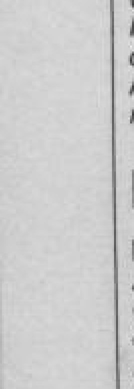
The Adventures of Jetman is not listed under the advertisers index because it isn't strictly speaking an ad, although of course it works indirectly that way. Ultimate asked us whether we would like it and us said yes. I think it's great, and I hope others like it too. As to Bat Attack, *you weren't the only reader to spot it…*

HELLO, I THOUGHT

Dear CRASH,
After reading your July issue (which was up to the usual excellent standard), I came across a review for *3D Bat Attack* produced by Cheetah Soft. Hello, I thought, this looks familiar, and then I remembered where I'd seen it before.

The listings for this game were published in the February issue (1984) of *Your Computer* magazine. What astounded me was that, at the end of the article, it stated that if you sent £2.30 and a stamped addressed envelope to: 'Mark C. Jones, 17 Park Walk, London SW10 0AJ,' he would be only too happy to send a copy on cassette. This represents a three-fold price increase over a period of five months.

Needless to say, I won't be buying Bat Attack, but will just type it in.
Brian Cizakowsky, Newcastle-upon-Tyne.



LUNARtics

Dear Sir,
I intend to keep this short as I know how precious time is; plus the fact that you probably won't want to read a load of grovelling waffle.

Please thank, on my behalf and the behalf of other LUNARtics who enjoyed Ultimate's new comic strip JETMAN, all those concerned. When I turned to page 88 of CRASH No. 6 I expected to read a complete load of tripe (shows how wrong you can be), but to my SURPRISE I spent the next half hour in hysterics while trying to read through it. It is the best for ages, more please. Once again, all thanks to those concerned.
Alastair Moore, Shirley, Solihull, W. Midlands.

JETMAN does seem to have gone down well, and the episode in the following issue (7) had me in hysterics too. I haven't been lucky enough to read this issue's episode yet. As you can see we are hoping to keep it going on a regular basis.
LM

IS IT LEGAL?

Dear Lloyd,
At school, a few of my friends and I have a small problem. You see we want to start a software club. In this club one of us would choose a software tape and then split the cost between ourselves. When we get the tape we would each get a copy and give the original back to the person whose choice it was. What we want to know, before we start is; is this illegal and, if not, will we have to ask the software house for permission before we start to copy their games?

One more point. Could you please thank Roger (the great one) Kean for mentioning my name to Yorkshire TV. They wanted me to appear in a new program of theirs called *THE GAME*, but unfortunately I couldn't because I was doing my 'O' level exams.
Simon Aspinall, Cawood, Nr Selby, N. Yorks.

Thanks noted! As to the copying, the simple answer there is yes it would really be illegal since, strictly speaking, any unauthorised copying of copyrighted tapes is illegal. Whilst no one can prevent you from collectively buying a tape and sharing it, I suspect the software houses would be very upset if you were to make several copies of a tape to share out.
LM

WHAT'S THE REASON?

Dear Lloyd,
I find your ratings generally excellent on most points but I have reason to believe that the 'Use of computer' percentage is at slight fault. This percentage refers to the control keys and joystick options, does it not?

When reading the control keys the *Les Flics* by PSS, and *The Prize* by Arcade I found they both possessed the same keys (cursors) and same joystick options but the rating for each was different. *The Prize* had 60% use of computer and *Les Flics* had 68%. Surely these must be the same? These errors were found in the July issue and there were probably more mistakes like these in previous month's.

What, if any reason, is the difference in percentages?
Andrew M. Proctor, Leeds, Yorkshire.

The answer to this questions relates to answers given previously about some of the obvious anomalies found in any rating system, but certainly in those of CRASH. One central problem is that there are three reviewers to take into account, each with a personal opinion on all the ratings. Their collated and averaged out ratings can make an enormous difference in some cases to the final outcome. But on top of that the 'Use of computer' rating does, as you point out, have to do with keyboard and joystick options, but also how effectively the program responds to either means of input. Obviously the number of variables involved in the final result will make for a difference. It might well be that a gap of some 8% is too much – I'm not by any means trying to say that CRASH ratings are foolproof, as indeed the next writer wishes to point out.
LM

RE-REVIEWS

Dear CRASH,
I am writing to complain about the reviewing systems in various magazines. When you want to buy a game you want the best on offer, and that's where the magazines come in. They tell you what type of game it is and how good it is. However, I have found that magazines cannot always be trusted.

For instance, in *Personal Computer Games* (March issue) they reviewed a game called *Apple Jam* whose overall mark was only bettered by two other games in the issue, *Scuba Dive* and *Fighter Pilot*. It even beat *Wheelie*, a game which you gave an overall 93% to. I was thinking of buying *Apple Jam* when I read your review of it. An overall percentage of 47 and comments such as, 'limited addictivity'. How could one mag differ so greatly from another?



As CRASH is now the only magazine I buy regularly, the following complaints only apply to CRASH (rest assured, though, you are not alone).

BLUE THUNDER, which you made a CRASH SMASH and which claimed six screens of scrolling action, was absolutely rubbish. The control keys are terrible and although the graphics are clear and detailed this alone does not make a great game.

BLADE ALLEY is a boring game and unless my copy has bug, you cannot get off level 2 without losing a life. The graphics are nothing sophisticated, so how do they get 87%.

Concerning Mark Powell's letter (issue 5), how DID *Zaxxan* get more than 30%?



I also disagree with your review of *Hunchback* where you said there was no +1 or −1 variation when jumping on and off the ropes but the issue before you had made *Jungle Trouble* your established game of the month. Crossing the river also has no +1 or −1 variation. Yet you slagged off *Hunchback*, why?

I also do not like the rating for Originality which does not bear any resemblance to how good a game is. Please get rid of it. These are a few of my complaints about reviews but may I add that I have found CRASH's reviews on the whole to be above average. Keep up the good work which, apart from a few hiccups, is excellent.
Lee Chapman, Aylesbury, Bucks.

Reviews in any magazine are personal opinions, and as we all know, a personal opinion can only be trusted so far. With three reviewers giving their opinions in a CRASH review we have done our best to remove the effect of any personal bias, but we can only be successful to a degree in this. As you say, you find our reviews on the whole to be above average. All the CRASH review team get to see hundreds of games in a year, many a month. I suspect they see more with a view to being critical than any other magazine's reviewers – they can also talk them over with each other to some extent. Apple Jam *was certainly felt to be a game worth only 47%. Have you seen it to discover for yourself whether* Wheelie *should have come out lower? That might be interesting!*

I can't comment on Blue Thunder *or* Blade Alley *very much, beyond saying that, again, most reviewers thought* Blade Alley's *graphics were worth the percentage given.* Zaxxan *has been in W H Smith's top ten sellers list for a few weeks, so obviously our opinion at the time has been reasonably matched by others. The overall attitude to* Hunchback *and* Jungle Trouble *is also coloured by the particular games, don't forget. We just didn't see* Hunchback *as being that great overall, and whilst I agree with your comments on the +1 or −1 variation, all I can say is that once you get the hang of it* Jungle Trouble's *jumping works really well, whereas I still find* Hunchback's *rope leap just a damned nuisance to the game. The Originality rating, as you will have noticed, barely survived one issue. It was introduced because of the quantity of letters we have received asking for it. So we tried it. It couldn't possible work, so we got rid of it, proving that well-known adage: some of the readers can be right all of the time, all of the readers can be right some of the time, but none of the readers can be right all of the time. Of course, the same is true of publishers too!*
LM



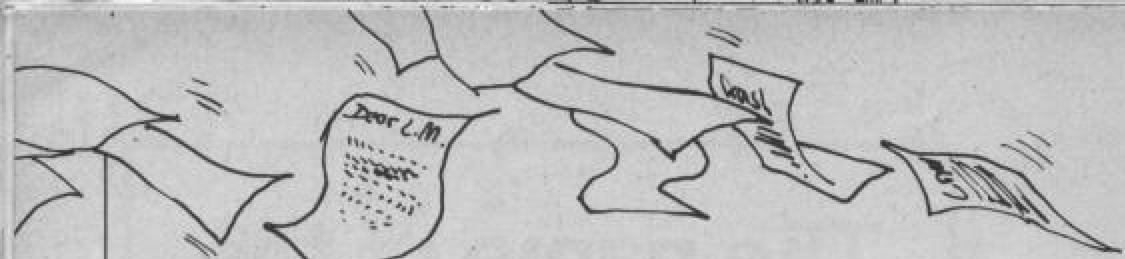
PIRATES

Dear Sir,
I find it slightly ridiculous that you are showing such sentiment to software houses. They went into business to make a profit, not to produce great games out of the goodness of their hearts. The pirates take some of this profit away, but the only reason they can do this is because the consumer does not wish to pay the high prices asked for games. Yes, Spectrum software is the cheapest around but still, at £5 upwards, the average child is not going to think twice before he or she tapes a friend's game.

The pirate exists because the price has been forced too high for the consumer to be prepared to buy. The only way, therefore, to get rid of the pirate is to cut the price or offer incentives (like prizes) which the pirates' games will not qualify for.

The software houses must realise that they have this competition rather than bleating to the press. I am quite sure that if the pirating were impossible the average price of Spectrum software would actually rise.

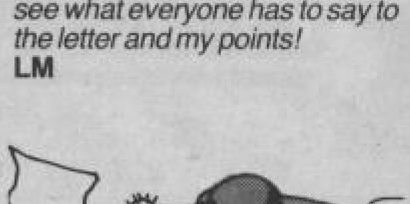
How can anyone blame the consumer for thinking prices are too high when they see Imagine's directors riding about on custom-built motorbikes and games having giant ad campaigns lavished on them? So it is time to stop feeling sorry for the poor little software house, they are running a business and, believe me, they wouldn't hesitate to exploit you if they could. The law of the jungle presides, the fittest, best



games producers will survive. I hope you print this letter as I'm sure it will stir up a lot of controversy and it's time the other side of this issue was seen.
Paul Watts, Ilfracombe, N. Devon.

We have had many letters on the subject of tape piracy, and, of course, some of them we have already printed. I think this is the strongest challenge to the software industry to defend themselves, though, and it would be nice to see some reaction from companies as well as readers on this one. Any takers?

Personally, I'm concerned with one thing only, the continued development of the home computer game. If you are using the word 'pirates' to describe the consumer who can't afford tape prices, that's one thing. But the rapid rise of commercial piracy is another matter. And one point I think that is valid is that the more 'consumer' piracy there is going on, the easier it is for commercial pirates to slip in their product, often complete with proper cassette covers etc. And believe you me, the real pirate IS OUT *to exploit you and me. The law of the jungle, incidentally has never said that the fittest and best survive, merely the strongest – in other words it is an amoral law and takes no account of real merit. Another point (which may not exactly show us in a good light, but what the hell, we're trying to be honest here!) is that pirates of any sort don't advertise in magazines. The money received from actually selling CRASH to you, the reader, just covers the cost of producing and printing each issue. Then comes all the costs of staff salaries, office overheads, typesetting, running competitions and numerous other hidden expenses. All that has to come from advertising revenue – without it there could be no magazines at all these days – certainly not ones that people would want to read – and we're always presuming here that people do want useful, informative magazines to read. However, enough said. Let's see what everyone has to say to the letter and my points!*
LM



COPYRIGHT PROBLEM

Dear Sir,
I buy your magazine regularly and I wondered if you can help me. I have a ZX81 and a Spectrum and I write programs for both. I would like to put some of these on the market but I do not know how to get a copyright for the programs. If you could send me some information or an address where I could obtain information, I would be very grateful.
Lee Allen, Buntingford, Herts.

Copyright is a rather strange thing here in Britain. There isn't any form or legal paper which will ever state that you are the copyright holder of such and such object. Basically, having written something in whatever form, or in any sense having created it, it is your copyright automatically. Naturally, to prove the point, someone will have to have seen it, and the best idea is to provide your solicitor with a copy of the game. In any event, your solicitor will be the best person to advise you on the matter because there is no office which deals with copyright in the same way that there is a patents office.
LM

MAPPED!

Dear CRASH,
I'll be quick, as I don't want to waste space in your brill magazine. After nearly 12 hours of playing, 3 asprins and a colossal electricity bill, I've completed *Sabre Wulf*. Shocked? So was I! Oh, not only was that 12 hours spent



Edward and the map.

completing it, I've mapped it! With help of course – my faithful sidekick Edward (Bontley) Brown. What's this? You don't believe me? Well, just for that, I'll send a picture of the end screen, and one of the map. So there!
Andrew Gates (and Edward Brown), Wolvercote, Oxford.

Who says we don't believe you? Well, you're not the first by a long shot, but you are the first to send any pix!
LM



Me, gone mad!



TOO MANY ADS

Dear CRASH,
After having read this month's edition of CRASH (July) we were disappointed to find that there were just as many adverts, if not more, than there was in last month's mag. We have been buying CRASH since it first came out and have always thought it the tops. But these adverts are driving us barmy. Please give us more of the games and less of the adverts. It's like reading through my mam's weekly, which consists of a few stories, letters and the rest is ads. Yuk!

We do not wish to sound like traitors, but if things don't improve we will seriously have to start thinking of looking around for another mag to replace our once great CRASH.
Darren White and Shaun Connelly, Gateshead, Tyne & Wear.

Come on kids – let's be serious please! I don't want to go on about ads to editorial ratio but it is a vital point, and as I said in a reply earlier in this column, magazines have to have advertising in them. I did check with the financial dept who calculated for me that without advertising helping to pay for the printing of CRASH we would have to charge something in the region of £1.50 for it, at least double the price. Anyway, if you look around, what other magazine are you really going to find with as many editorial pages to adverts? Not many I assure you. Check it out. We'd hate to lose you as readers, but without the ads there wouldn't be a CRASH. Honest.
LM



TÍR NA NÒG



GARGOYLE GAMES

48K ZX SPECTRUM

Tir Na Nòg – the land of youth, the other world.

Tir Na Nòg – the kingdom of the sidhe, the home of dagda's cauldron.

Tir Na Nòg – a vast and complex adventure, in a magical celtic landscape.

Tir Na Nòg – a most stunning visual experience, with state-of-the-art film animation.

Tir Na Nòg – a true computer movie.

THE GREAT SPACE RACE IS

Legend have announced their second title–it's called **The Great Space Race** (or, in a world of jargon–**TGSR** for short). With a prescience based firmly in sensible marketing techniques, the company which was originally named Microl, changed its name to Legend shortly after the release of their first game, *Valhalla*. In a short space of time and with only one product, Legend have indeed become something of a legend.

Valhalla has clocked up some pretty impressive statistics–something in excess of £2m in sales on the Spectrum alone with launch orders in the region of quarter of a million pounds for the Commodore version. the game swept the boards to win the **Leisure Program of the Year** award from the Computer Trades Association and the *Game of the Year* award in the 1984 British Microcomputer Awards run by *Personal Computer Games*.

No surprise, then, that the recent announcement about their second game should have caused such a stir among the press.

MOVIE SOFT

The Great Space Race continues the developmment of ideas first seen in the *Valhalla*, although *TGSR* is not a 'Valhalla clone'. In keeping with *Valhalla*, however, *TGSR* is going to be a hard game to categorise–neither adventure, nor strategy, it combines many of their elements into an arcade situation. The basic premise of the game is very simple–the player will be engaged in a death struggle against the computer to win a race through space. It is split into two distinct sections, the first being to select a crew for your racing ship, the second being the race itself. As I said, the premise is simple, the game isn't. The concept of 'moviesoft' is to make computer games more like interactive films, and the stick figures of *Valhala* have now become fully animated beings. Legend are particularly proud of their routine with the dubious title of FRIG (which stands for Facial Region Interpreted Graphics. What it means to the player is that the characters you control are animated right down to the facial details.



In part one you must bargain with computer controlled characters for a crew and for back up fighters. As in *Valhalla*, the game continues with or without you so you may well find that by the time you have negotiated for, say, a good fighter pilot, the crew member you also wanted has been snapped up by the computer for its crew. The second part, which is more of an arcade type game, is a very violent race with no holds barred. It requires fast thinking as options always have a time limit on them, but is played with single key presses to activate any option. All your characters talk to you over the Vidphone, appearing in person to ask for instruction. A typical action request might be from a fighter who wants to know whether he could chase and attempt to destroy another fighter trailing you, whether he should just follow it or ignore it. All the characters are individuals and must be chosen for their abilities.

No decision yet has been taken on how many 'enemy' characters you will be racing against. This is being currently determined by the Legend scret play test group. The game, too, is still under wraps but Legend say that the screen graphics are presented in true solid 3D, not wire frame, and the program has a Camera Director Module which can present literally billions of possible views of space.

THE LEGEND

Legend itself has remained something of a mystery. 'We are not, by nature, a high profile company,' says it Chairman, **John Peel**. 'We let the product speak for us and so all the emphasis is put on the product.' At the centre is the husband and wife team of *John* and *Jan Peel* with the marketing back-up of **Peter Moxham**. A team of some seven other programmers work on the games both in-house and on a contractual basis. 'When we started,' says John, 'we wanted to put together the finest software team, all very professional programmers.'

Their efforts are concentrated on one project at a time. *TGSR* is a much bigger project than *Valhalla* and John says they have spent close on a quarter of a million developing it ready for its October launch on both the Spectrum and the Commodore.

ACS ON . . .

John Peel acts as overall producer, co-ordinating the development of the game while Jan is reponsible for much of the characterisation and still regards the people of *Valhalla* as her 'children'. They operate from a suite of offices in the suburban surrounds of Chingford, North London, only a stone's throw from Epping Forest. Upstairs are rooms which contain the development environment. Unusually, Legend's games are developed on BBC Micros, heavily modified and backed up with plenty of disc storage. the results can be dumped via the port into the respective target computer for checking. Asked whether they would eventually translate *Valhalla* and*TGSR* on the Beeb, John snorted contemptuously and replied that the machine couldn't cope with the memory requirements.

ON YOUR MARKS, GET SET...

It won't be long to wait now for what Peel describes as their spectacular futuristic romp. Readers of CRASH will be given a treat and should keep their eyes peeled in the next month's issue, as we will be running a competition to with *The Great Space Race*–butyou'll have to be good as there are only a select number of winners possible. The launch is bineg backed by T-shirts and sweatshirts, a strong advertising campaign and the kind of detailed presentation that made *Valhalla* a success. And what comes after *The Great Space Race?* What about the future, I asked John Peel?

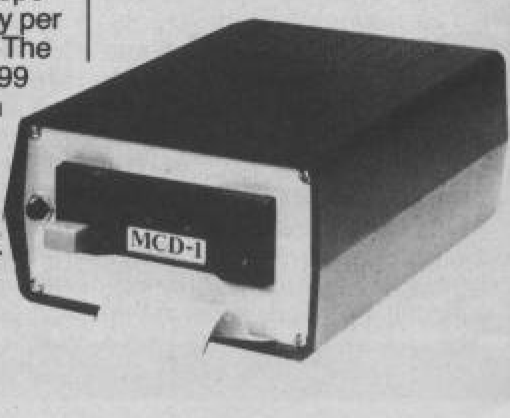
He looked thoughtfully up at the ceiling and said softly, 'Yes, we are thinking about the future...'

SPECTRUM 'AWARENESS PACK'

The **Open University** has made its Micros in Schools 'Awareness Pack' available for the 48K Spectrum to enable parents–as well as teachers–tp understand the many ways children can benefit from the use of computers in the classroom. The pack is designed for computing novices and brings the user to the point where it is possible to connect up, switch on and use the educational material on the microcomputer, evaluate its potential and understand enough computer jargon to communicate with computer experts, it is claimed. Further information is available from the **Micros in Schools Project, Open University, Milton Keynes MK7 6AA (Tel: 0908 367264).**

SPCTRUM FLOPPIES

The hardware add-on people **Thurnall Electronics** have launched a low-priced 3 inch drive for the Spectrum. It may be used with either 16K or 48K machines and allows the use of other add-ons. The Disc Basic allows the user to SAVE and LOAD programs, programs which start at a specific line automatically, pictures in full colour, strings, string arrays and multi-dimensional string arrays, numeric array and multi-dimensional numeric arrays, as well as code to/from any specified memory locations. The drive will cope with 150K of data capacity per disc (200K unformatted). The 3 inch disc drive costs £199 and comes complete with all cables and plugs, available direct from **Thurnall Electronics Ltd., 95 Liverpool Road, Cadishead, Manchester Hotline orders on 061-775 7922.**



GAMES WORKSHOP

If you like complicated board games with an adventure feel to them, then you will probably have visited the excellent **Games Workshop** shops in London, Manchester, Sheffield, Nottingham or Birmingham. Hives of dungeons and dragons industry, **Games Workshop** have also been selling appropriate computer games. Now they have launched two games for the 48K Spectrum on their own label–**Battlecars** and **D-Day. Battlecars** is set in the year 2081 and involves two players battling to the death in illegal car duels fighting with missiles, machine guns and mines. **D-Day** is a graphic wargame based on the Normandy landings of 1944. Two players take the part of the Allied and German sides, battling through four different locations. The players have between forty and sixty units each to deploy including tanks, bridge-layers, infantry and ships. Both games should be available from October, priced at £7.95. Watch the next issue for more details!

SINCLAIR BLITZ

Sinclair Research is to spend £2.5m on promoting the ZX Spectrum computer over this coming pre-Christmas period. They expect to sell a further 500,000 inits between now and Christmas. In contrast the QL only gets a budget of £1.3m. A further sum of £200,000 will be spent promoting the free software that Sinclair is giving away with each Spectrum purchased.

DK 'TRONICS SPECTRUM CLUB DRAW

As we announced in the June issue of CRASH **DK 'TRONICS** have now made the draw of entries to their **Spectrum Owners Club.** Winner of the fist prize, the Sinclair QL computer is **Richard Hildrick,** 9 Ashdale Road, Helmsley, York. Second prize winner (£100) is **Andrew Fairholm,** 63 Rugby Road, Clifton, Rugby. Third prize winner (£50) is **Simon Harvey,** 136 Rockingham Road, Kettering, Northants. And the fourth prize winner (£25) is **Mark Middleton,** 9 The Broadway, Morton, Nr. Bourne, Lincs. The winners have been notified by DK'Tronics.

NEW VENTURE

In the August issue we reviewed the strategy/finance game **New Venture** from **Falcon Computing.** Unfortunately the price was missing from the review. It is £5.95

NEW CIRCLUATION MANAGER FOR CRASH

Newsfield Limited, the publishers of CRASH Magazine, have appointed **Mr. Tom Hamilton** to be Circulation Manager. Tom Hamilton has spent many years in the wholesale and retail side of magazine sales and also has substantial interests in computer and software sales. He will be operating from his ofices in BIrmingham and will be intersted to hear from any readers or retailers who encounter difficulties in obtaining CRASH in their locations. Contact Tom Hamilton at the **Sheldon Software Centre, 2065 Coventry Road, Sheldon, Birmingham B26 3DY.**

DOWN YOUR WAY



Downsway proves the point that not all programmable joystick interfaces have to be big and bulky. The unit plugs into the edge connector port of the Spectrum and could be mistaken for a neat rampack if it were not for the 9-pin D plug protruding from its side and a two position slide switch. What is quite astonishing is that there is no logo or maker's label to identify the unit, which is pushing the incognito image a little bit too far. No instructions are provided with the unit, so beginners may have to solve the riddle by process of elimination.

OPERATION

The interface must be programmed from Basic. The slide switch is set to programming mode (Upper position for lack of annotation). Each individual joystick function is programmed in turn. The joystick lever is activated and at the same time the appropriate key pressed on the keyboard. Care must be taken to ensure the level is released before releasing the key on the keyboard, as the memory stores the actual data on release of the lever. Once this operation has been completed for all the functions, the slide switch may be returned to the normal position. The function of the joystick may now be checked and the correct characters should appear on the screen when activating the joystick.

The Spectrum is now ready for the game to be loaded. *Atic Atac* is taken here as an example. This game has provision for Kempston, Cursor or keyboard control. Either Cursor or keyboard control may be used in combination with the Downsway interface.

Keyboard control will be chosen and the joystick controller programmed for left, right, down and up using Q, W, E and R and fire action with T. Having checked the individual actions in Basic, the game is loaded and the keyboard control selected (option 1). On play, two things become apparent. First the good news, the fire action, although programmed only individually, will work even when activating a direction control. The bad news is that the diagonals do not oblige in a similar manner; they will not operate unless they are programmed beforehand. The same programming procedure as with the other directions applies, only that two movement keys will have to be activated at the same time while holding the joystick lever in a diagonal, so depressing Q and R keys the joystick must be pushed into the upper left diagonal and released.

In fact the standard procedure will be to program the 4 diagonals first and then the 4 main directions followed by the fire action. A snag will occur when trying to check the programmed functions, as Basic will not register two keys activated simultaneously and therefore the diagonals cannot be checked. If an error has occured, it will only be noticed after loading the game and this means having to reset the Spectrum and restart the procedure. With a bit of practice, however, this should not occur. The fact that the programming has to be accomplished in Basic requires the function keys for the game to be known beforehand. In most cases this information will be found in the cassette inlay. During the period of the test, the Downsway unit performed faultlessly and without any side effects.

CONCLUSION

The Downsway interface is a very compact and effective programmable joystick controller. The lack of programming instructions complicates the initial use, especially since there is no annotation of the slide switch.

As with most of the soft or hardware programmable interfaces the programming is required to be done before loading the game and requires a little exercise, but apart from this drawback the unit proves to be far more versatile than any of the standard interfaces and provides a joystick facility for any game on the market.

Franco Frey

Poppy Soft *Crash Competition*

Factory Breakout

Don't forget the exciting competition to describe what happens on the fourth screen of **Poppy Soft's** arcade action game **FACTORY BREAKOUT**. Details are to be found in last issue's CRASH, but we want to remind you that this one runs for two months, so there's still time with the competition only closing on **September 27**!

Prizes are a **Poppy Soft** game to the first 100 correct entries drawn from the bag, the first ten receiving in addition a copy of Poppy Soft's brand new game due in December, and for the very first one drawn, **£100 on top**! Don't miss out – get playing **FACTORY BREAKOUT** and discover the secret of the fourth screen!

Answers on a postcard (or outside of a sealed envelope) to **FACTORY BREAKOUT COMPETITION, CRASH MAGAZINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.**

Crash Competition

WIN A COPY OF

rapsca

THE NEWEST GAME FROM BUGBY

100 COPIES TO BE WON!!!

In last month's issue of CRASH (August) we reviewed the latest arcade game from **Bug-Byte** – a linked-screen maze game to drive everyone crazy! Now CRASH readers are offered the opportunity to win a copy of **RAPSCALLION** by answering the usual bunch of amazingly difficult questions (which are mostly based on our review of the game).

First, though, a little bit about Bug-Byte, the company that brought you the delights of *Cavern Fighter, Antics* and *The Computer Cook Book*, as well as tossing off minor attractions such as the original version of *Manic Miner*!

Bug-Byte was first set up in May 1980 by **Tony Baden**, **Tony Milner** and a third partner who dropped out early on. The two Tony's were reading Chemistry at University College, Oxford. They were both keen on building computers from kits, and as there was no commercial software available at the time, started writing their own. Investing £10 each, they placed classified advertisements in *Computing Today*, advertising games for the Sinclair ZX80. Bug-Byte was launched. As the money came in, it was immediately ploughed back into further programs and more advertising. In the spring of 1981 Sinclair launched the ZX81, and the market began to expand. Baden and Milner were due to leave college and had to decide whether to carry on as chemists, or take the risk of going full time into the software business. They chose the latter and headed for Liverpool, where Bug-Byte still has its headquarters today. The offices in The Albany, Old Hall Street had no phone, no desks and no staff – just a box of cassettes and some home computers.

In the latter part of 1981 a few more staff were taken on, and this was repeated in 1982, including some programmers. When Spectrum came along, the expansion continued until early 1983, by which time The Albany was too small and Bug-Byte moved into new premises in Mulberry House, Canning Place in Liverpool. During this time, two of the staff, Mark Butler and David Lawson left Bug-Byte and set up their own company – Imagine.

Early in 1984 Bug-Byte began to set up

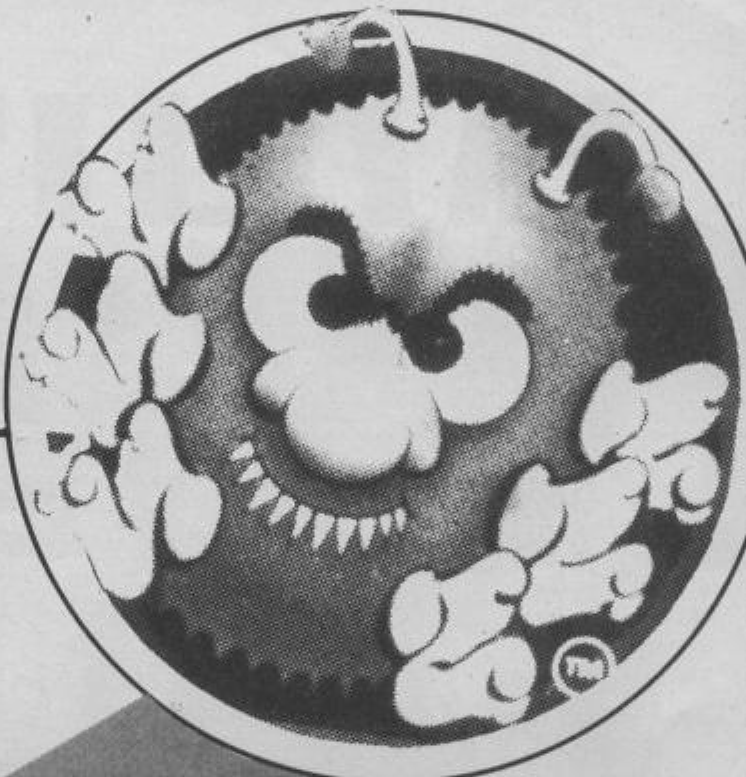


llion

BUBYTE

N!!

a professional in-house programming team with their most experienced freelance programmer at its head – **Trevor Hall**. Last Christmas But-Byte dominated the charts with the best-selling *Manic Miner* which went on to be awarded Arcade Game of the Year by *Computer & Video Games*. Recent best-sellers included *Cavern Fighter, The Birds and the Bees* and the follow-up *Antics* (subject of our Playing Tips map this month). Many new games are on the drawing boards and keyboards, including a game based on the television series 'Automan', for which Bug-Byte recently secured the rights from 20th Century-Fox. Its early start in the home computer games market, means that today Bug-Byte is among the oldest companies around – almost a great-granddaddy – ZX80 – ZX81 and ZX Spectrum!





RAPSCALLION COMPETITION

All you have to do is answer the questions below, and most answers may be found in the review in last month's issue (page 93). Write the answers on a postcard (or the outside of a sealed envelope) and send them to **RAPSCALLION COMPETITION, CRASH MAGAZINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB**, to arrive no later than **27th September**. The first 100 correct entries pulled from the bag will each receive a copy of *Rapscallion*.

1. Name three domains to be travelled through in *Rapscallion*.
2. What will you need in order to be able to see the three wizards who guard the castle entrance?
3. 'You' play the game *Rapscallion* as two different characters – what are they?
4. The graphics in *Rapscallion* are rather unusual and can be described in one word – what word?
5. Count up how many times the word 'Rapscallion' appears in the review on page 93 (last issue), then multiply the answer by the Overall rating and give the final result.
6. Name six programs for the Spectrum released by Bug-Byte.

WHITE LIGHTNING STRIKES

There is a large interest developing in Games Designer programs. Lots of Spectrum owners have experienced a wealth of commercial games programs. Many of them feel at one point or other that they could improve and do better programs or have original ideas for new games concepts. Some may have experience of programming in Basic and have felt the disappointment in the deficiencies of Basic as a graphics and sound language. Every programmer goes through the stage of despair at the lack of speed when operating from Basic. Only very few will dare venture into low level machine code language directly from Basic. They will either learn to use specific machine code routines, which they will be able to access from Basic, perhaps using a machine code toolkit, or they will delve into a high level graphics development language. Nearly all of these dedicated people will find themselves learning machine code operation in the end and become machine code freaks. The interim stage of a high level graphics language or of a toolkit will help them bridge the gap between Basic and hex code programming by improving the end result of their work and thus keeping their interest alive long enough. In fact, the results may be so impressive, that some people may not even be bothered to develop any further and settle for this relatively easy and rewarding interim stage.



THE WHITE LIGHTNING PACKAGE

White Lightning is a high level development system for the Spectrum 48K. It consists of three distinct programming blocks:

The Sprite Generator
Spectra Forth
Ideal

The *White Lightning* language is a fast integer Forth which conforms to standard Fig-Forth.

Ideal is a sub language incorporated in Forth which deals with the graphics manipulation.

The Sprite Generator is a stand alone utility, which provides a development system for creating user defined characters and sprites for later use in Forth and Ideal *or from Basic.* Due to the wealth of material, only a very marginal cover can be given, but this should give the programmer an idea of the possibilities contained in this package.

THE SPRITE GENERATOR PROGRAM

The Sprite Generator program assists in the design and editing of graphic characters, which will later be manipulated as sprites in Forth, Ideal or Basic. At the end of the session the sprites generated can be saved to tape for later use. 167 arcade characters are provided with the package. These can be reviewed by loading and running DEMO B on the demonstration cassette. The demonstration sprites are located after the *White Lightning* program and may be loaded and edited with the LOAD SPRITES FROM TAPE facility.

The Sprite Generator program displays to the left the character square, an 8 by 8 grid and is the area where the sprites are created and edited one character at a time. The Sprite Screen situated on the right is an area of *15 × 15 characters in which* sprites are created, developed and transformed. A sprite library *of up to 255 sprites or 12500* bytes may be created and more than one library may be merged into *White Lightning.*

The character is generated on the character square and then transferred to the Sprite Screen. From here it can be used for sprite creation or saved directly as a sprite to memory. An information rectangle provides the information of the sprite in the Screen Window. It indicates the memory left, start

and end position in memory, sprite height and length (in characters) and the sprite number. The special functions provided are plenty and include mirror, rotate and attribute handling. Sprites can be combined into larger sprites. Sprites may also be combined using the Boolean (logic) functions OR, AND, EXOR. The functions are too numerous to mention.

SPECTRA FORTH

The standard Spectrum editor or a special Forth line editor may be used to create the source code for later compilation. Forth achieves its superior computing speed by employing a computation and data stack on where the data or operations to be performed are held coupled with the use of Reverse Polish Notation, which may be familiar to Hewlett Packard pocket calculator owners.

The language is made up of a standard set of vocabulary of Forth words. Programming is achieved by defining new words based on the words of the existing vocabulary ('The house that Jack built...' principle). Values to be passed to these words are pushed onto a stack. Forth produces very compact code, the source code is very readable and it has near enough the speed of machine code without requiring the in-depth knowledge of machine code. Access may be gained to Basic and to machine code routines for full flexibility.

IDEAL

Ideal is a sub language with a dictionary of over 100 words. Ideal stands for 'Interrupt Driven Extendable Animation Language' and is designed to facilitate the manipulation of sprites and screen data. Forth/Ideal words can be executed under interrupt. This facilitates timing, as the Spectrum interrupts occur 50 times a second independent of any running program. This way smooth background scrolls may be produced independent of the foreground movement. Idealmay also be accessed from Basic. This allows the programmer to utilise the animation and screen facilities of Ideal before having to learn Forth. The animation speed will be reduced due to the higher overheads of the interpreter, and more memory will be used for the Basic source.

Most of the Basic commands that handle sound and graphics on the Spectrum have been implemented in Forth and if these functions are accessed via Forth, will execute more rapidly.

DEMONSTRATION

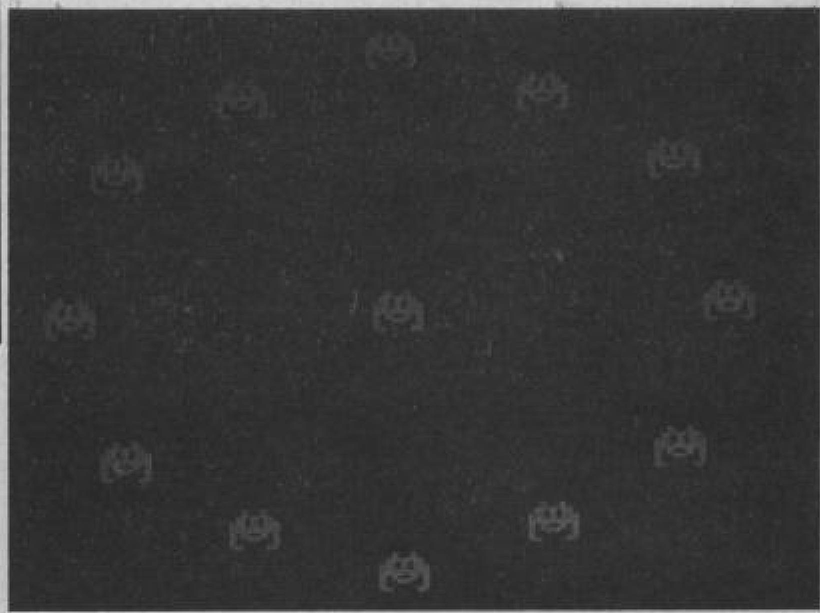
Running the demonstration tape gives a clue as to what can be achieved with Ideal/Forth. All demonstrations are explained in the manual indicating the method employed and the commands required for the special effects. The animation is very fast and the interrupt facility displayed to its advantage in several demonstrations.

MANUAL

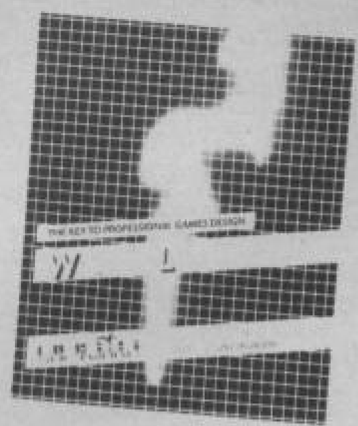
It is here where *White Lightning* scores very highly. The manual is a 131-page booklet and provides an excellent introduction into this highly versatile language system. The manual is divided into the three main sections on the Sprite Generator, Spectra Forth and Ideal. Each and every command is explained in detail and illustrated with sample programs.

Glossaries are given for Fig-Forth, Ideal, Forth/Basic and Extended Spectra Forth. Important Usr call addresses are listed.

The demonstration programs are briefly described and 16 sample programs are provided for the aspiring Forth/Ideal programmer.



A Spritely bunch

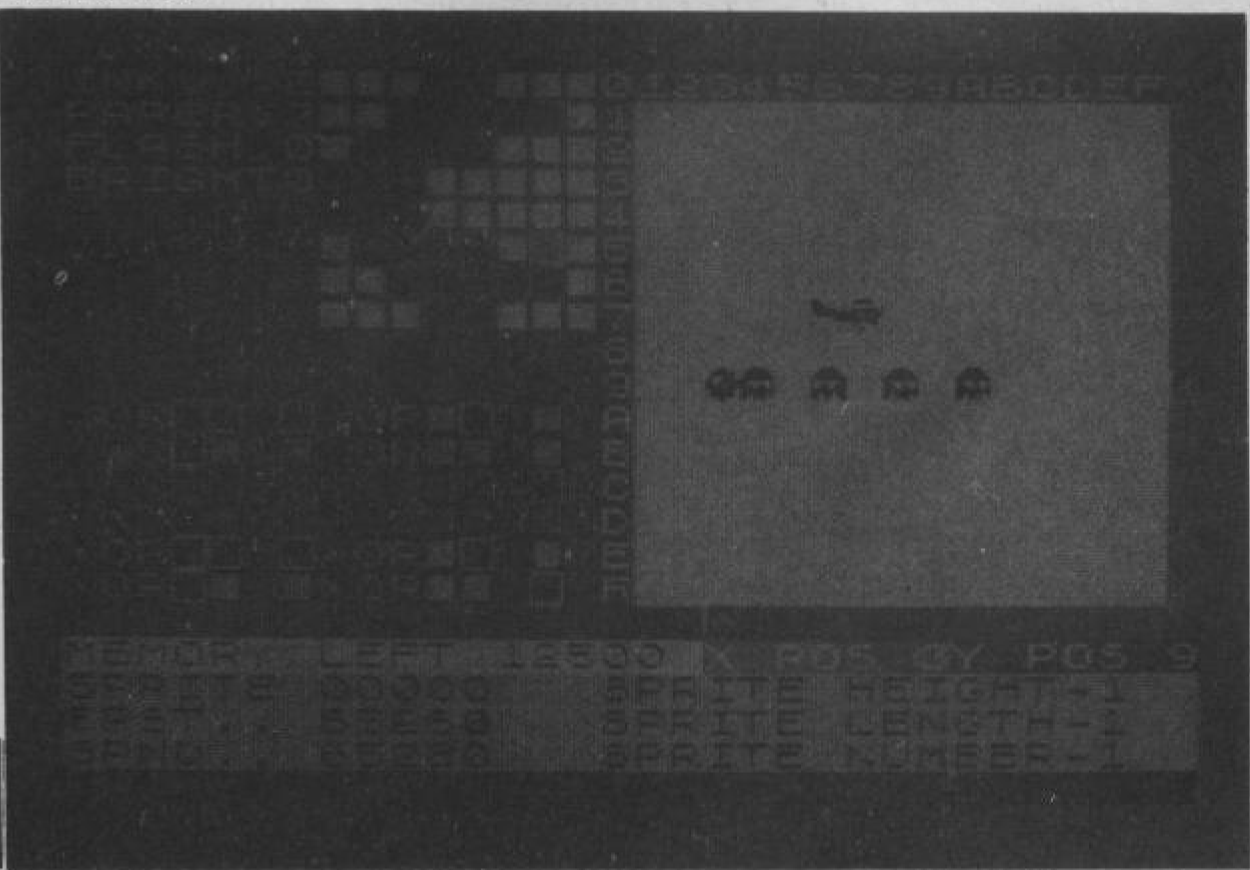


CONCLUSION

White Lightning proves to be more than just a high level graphics development system. At £14.95 it includes a fast and efficient Forth language, the graphics sub Ideal and a versatile Sprite Creator all accompanied by an excellent beginners and reference manual.

Franco Frey

The Sprite factory





Lloyd Mangram's HALL of SLIME

Sabre Wulf 106,230 at 76%
Atic Atac 99% in 4 mins 49 secs
Valhalla – finished
Laserwarp 13,875 (code K2DT)
Code Name Mat 522 (AFFKFBC)
Cookie 19,520
G-Force 128,000
Wild West Hero 86,000
Exterminator 210,500 on L3
Jet Set Willy – completed
3D Deathchase 91,000 on L15
All from **Jason Hart (14), Peterborough, Cambs**

Atic Atac 4 mins 4 secs
Manic Miner 500,439 and 25 men left
Jet Set Willy – completed
Gary Barley, Westcliffe-on-Sea, Essex

Chuckie Egg 249,000 odd
Manic Miner 160,000
Bugaboo – out in 21 secs
Orc Attack 46,570
Guy Veale (12), Merton Park, London SW19

Zzoom 81,040, 174 refugees
Chris Baker, Milford Haven, Dyfed

Sabre Wulf 201,195 in 100%
Arcadia 118,724 on L100+
Penetrator 223,170 (10 missions)
Deathchase 85,634
Chuckie Egg 398,880
Christopher Hawkins (15), Lincoln

Sabre Wulf 115,995
Laurence Reeves, Newhaven

Chuckie Egg 253,250 on L23
Defenda 47,750 (NMNOMUA)
Jetpac over 1,000,000
Howard Rogers, Saltdean, Brighton

Chuckie Egg 209,980 on L20
Pheenix 28,025
Penetrator 163,050
Ah Diddums Box 9
Fred 10,000
Manic Miner 103,179
Kong 339,856
Kevin McKay, Paisley, Scotland

Lords of Midnight – completed
Ship of Doom – completed
The Hobbit – completed
Deathchase 83,762 on L16
Tranz-Am – 8 cups in 4 mins 3 secs
Code Name Mat – all Myons dead 2nd level
Chuckie Egg 242,670 on L22
A. Carson, Blackpool, Lancs

Hunchback 1,357,700
Mr Wimpy 101,450
Sabre Wulf 128,880 at 99% and 76%
Atic Atac 64,705 at 99% and 67%
Chequered Flag 1:00:26 at Monza, 1:05:90 at Silverstone
Android 2 6,360
TLL 6,285
Tower of Evil 6,285
Pogo 79,900
Trashman 6,778
Deathchase 109,455
Pssst 60,085
Splat 11,285
Bugaboo 28 secs
Tranz-Am 15,220
Chuckie Egg 240,200
Lee Chapman, Aylesbury, Bucks

Ant Attack 28,411 (completed)
Zzoom 106,000 odd
Timegate – completed on L1
Orc Attack 99,475
Sam Veale (10), Merton Park, London SW19

Sabre Wulf 94,000 at 71%
Richard Poole, Hucclecote, Glos

Planet of Death – completed 1 day
Ship of Doom – completed 1 day
Golden Apple – completed 2 days
Colossal Adventure – completed 2 days
Smugglers Cove – completed 3 days
Velnor's Lair – completed 2 days
River Rescue 68,700
Deathchase on to L22
Simon Paul Webb, North Bransholme, Hull

Lunar Jetman 375,195 on L30
Jetpac 762,955
Pssst 493,640
Manic Miner 1,695,211
Arcadia 929,631
Penetrator 976,520
Deathchase 56,330
Chuckie Egg 457,610 on L35
Sabre Wulf 256,320 at 99%
Ant Attack 46,767
Pogo 184,100
Alan Simpson (16), Milton, Glasgow

Hungry Horace 149,010
Pogo 97,675 on L13
Tranz-Am 8 cups in 2 mins 12 secs
Atic Atac in 5 mins 4 secs
CDS Pool 1,280 (4th frame)
Pyramid 128,623
Barry Leadhem, Lurgan, Co Armagh

Night Gunner 23,385
Lunar Jetman 115,535
Atic Atac 40,370
Ant Attack 46,112
Blade Alley 23,475
Sabre Wulf 39,055
Mark Graysmark, Copthorne, Crawley

Chuckie Egg 398,890 on L30
Barry Kerfoot, Oldham, Lancs

Atic Atac 19,710 in 2 mins 19 secs
Trashman 40,208
Andrew Allsop, Morley, Leeds

Chuckie Egg 244,320 on L22
Trashman 17,621
Automania 9691 on L5
Cyber Rats 206,293
B. Benson, Saffron Walden, Essex

Chuckie Egg 576,000+ on L40
Derek M. Tobias, Giffnock, Glasgow

Sabre Wulf 103,935
Paul Fyfe, Feltham, Middx

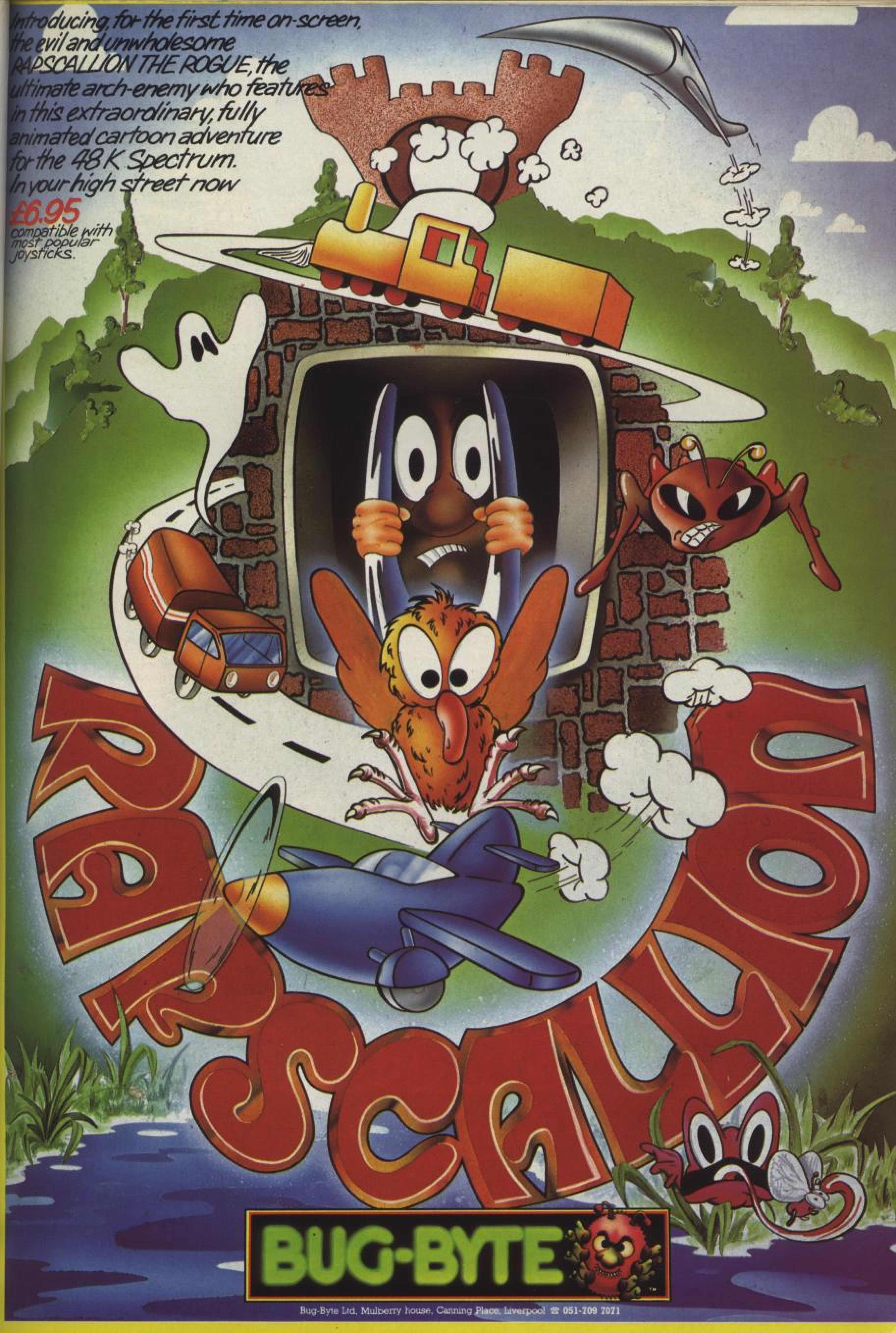
Bugaboo 17 secs
Sabre Wulf 92,645 at 78%
Pyramid 117,353
Tribble Trubble 19,850
Ant Attack 40,751
Maziacs 92 on Adventure 1
Nicholas Starling (13), Norwich, Norfolk

Penetrator 189,000
Zzoom 369,000
Ant Attack 33,000
Sabre Wulf 107,250
David Newton, Swindon, Wilts

Chuckie Egg 2,355,430 on L124
This staggering claim comes from **Martin Rose, Walthamstow, London E17**, and he says he reached this incredible score after 3½ hours non-stop playing. We can only hope it's true!

And that's it for this month, sorry to those whose scores didn't make it in. As you can see, I don't try to pick the highest necessarily, it's just the way they come out of the file, and some may pass over to next month, unless there's another deluge! Keep them coming and keep them honest, or there's no point.
LM





Introducing, for the first time on-screen, the evil and unwholesome RAPSCALLION THE ROGUE, the ultimate arch-enemy who features in this extraordinary, fully animated cartoon adventure for the 48K Spectrum.
In your high street now
£6.95
compatible with most popular joysticks.
RAPSCALLION
BUG-BYTE
Bug-Byte Ltd, Mulberry house, Canning Place, Liverpool ☎ 051-709 7071

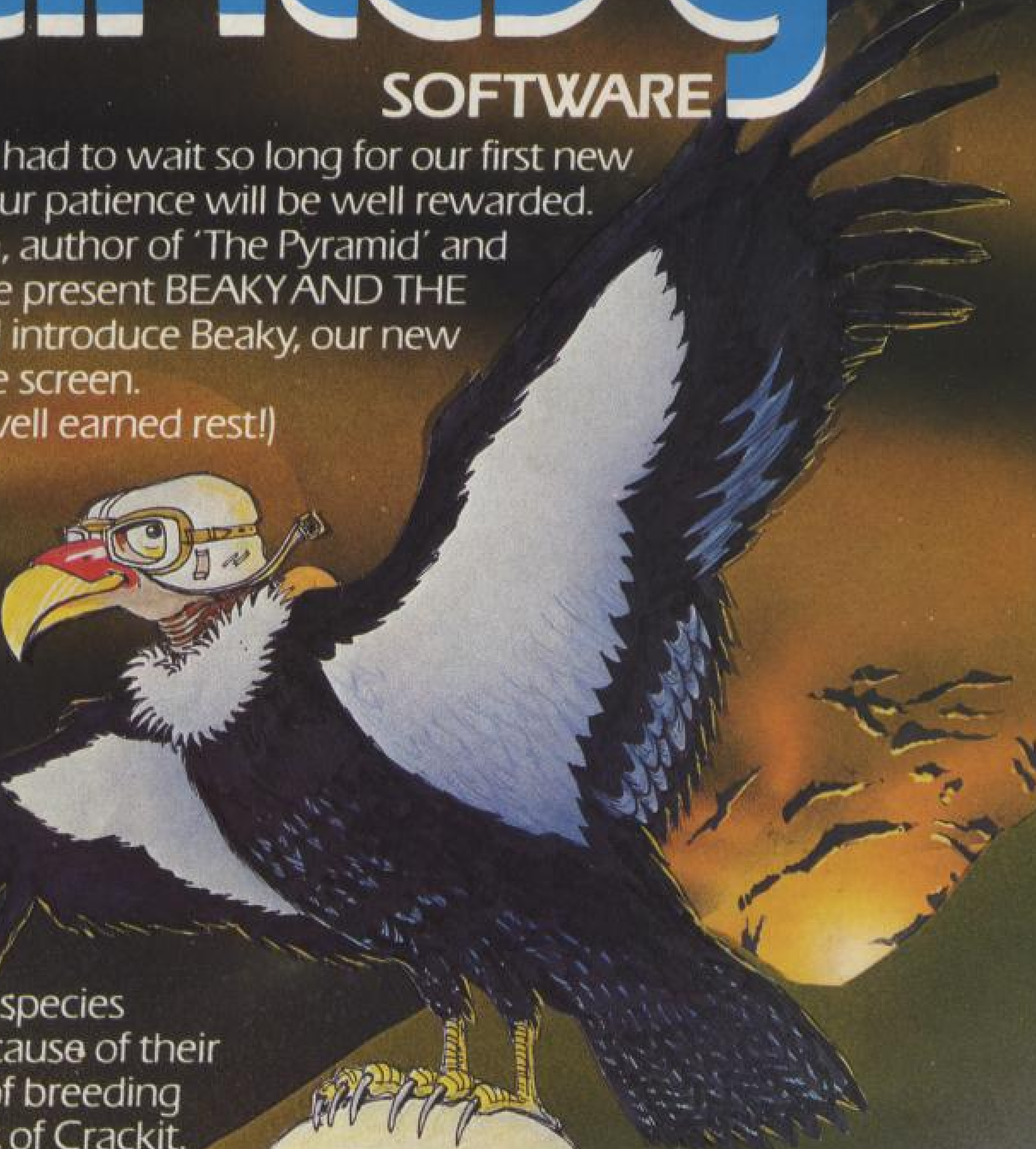
fantasy
SOFTWARE

We're sorry you've had to wait so long for our first new release of 1984 but your patience will be well rewarded.

From Bob Hamilton, author of 'The Pyramid' and 'Doomsday Castle' we present BEAKY AND THE EGGSNATCHERS and introduce Beaky, our new star of the video-game screen.

(Ziggy is having a well earned rest!)

Beaky belongs to the family of Andromedan Armed Condors, the rare goggled variety.



The numbers of his species are dwindling fast because of their rather foolish choice of breeding ground, on the planet of Crackit. This unfortunately happens to be the home of a particularly evil band of creatures known collectively as the Eggsnatchers. Their sole malicious intent in life is to extinctify Beaky's species by stealing or destroying the eggs by any foul means available.

BEAKY and the Egg Snatchers

for Spectrum 48K and Commodore 64

Your objective is to try and brood, hatch out and rear as many little Beakys as possible through 12 different screens of formidable but delightful arcade action.

FANTASY SOFTWARE is available from W.H.SMITHS, JOHN MENZIES, BOOTS, WOOLWORTHS, LASKYS, GREENS, RUMBELLOWS, SPECTRUM GROUP and all other good software retailers.

Beaky and the Eggsnatchers is available for 48K Spectrum and Commodore 64 at £6.50 on cassette or on disk for the Commodore 64 at £9.50 from

FANTASY SOFTWARE, FAUCONBERG LODGE, 27A ST GEORGES ROAD, CHELTENHAM, GLOS GL50 3DT

despatched by return first class post together with free membership of the Fantasy Micro Club.

Trade Enquiries welcome – telephone 0242-583661.

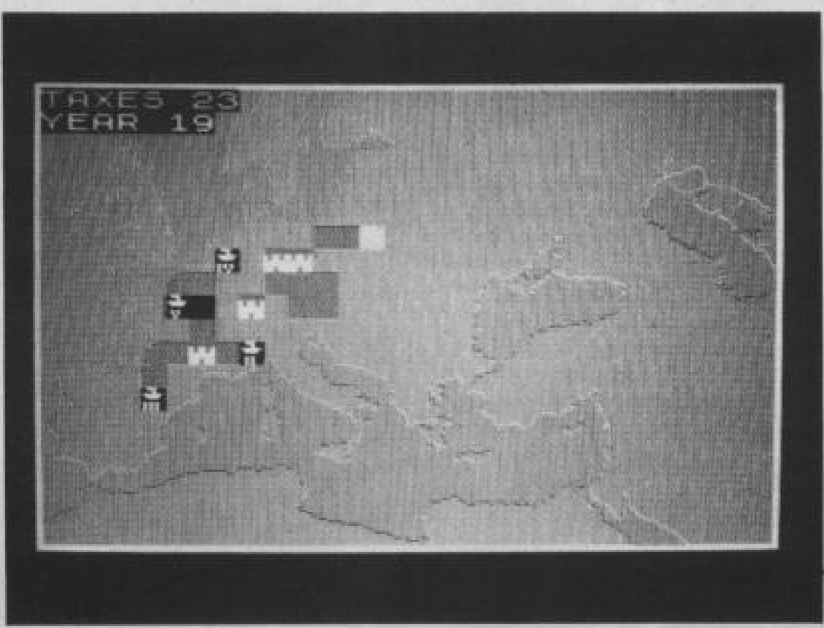
CONQUEST

Producer: **Cheetah Soft**
Memory required: **48K**
Retail price: **£6.95**
Language: **BASIC**
Author: **Douglas Nightingale**

Mediterranean Europe is divided into grid squares. Your aim as emperor is to gain 100 squares of territory as quickly as possible in the graphics strategy game, *Conquest*. You'll have to contend with barbarian counter-attacks on your flanks, random plague attacks which may wipe out one or more of your legions, and the possibility of civil war.

Conquest is for one player, and the game takes place over a map of Europe and half of Russia. The cassette comes with instructions on screen on one side and the game on the other. The known world is divided into 600 territories, or squares, which include sea. Movement onto land is permitted, but not onto sea squares. The game starts by choosing a location for the capital city, which can support only one legion, commanded by the emperor and coloured purple. As this legion moves it colours the territory occupied red. For every five squares captured, you are awarded another legion, commanded by a general, and these captured territories are coloured black. If territory is lost, so may the legions be, as there may not be enough taxes to support them. The legions are allowed to move one square at a time, controlled by the cursors. The emperor's legion has unlimited movement within the empire but also makes a single square capture per move. There is a maximum of 16 legions available. Attacks by barbarians on an unprotected flank may wipe out a captured territory. Such attacks occur more frequently as the game progresses.

There are five levels of difficulty, each adding more playing factors such as generals falling in battle, the legions receive combat records indicating their chances of successful conquest, the emperor may also be killed, in which case a general will declare himself and civil war may break out. In between moves the computer takes action like outbreaks of plage and deciding whether legions become disloyal.



The Conquest of Europe is about to finish – 19 years of struggle for a few red squares.

CRITICISM

● 'This tactical game set in Europe ages ago is fairly typical of the strategy layout and in its aims. It's also fairly 'typical' in the sense that it isn't exactly very exciting (remember the one about watching paint drying?). The best part of the game is the map of Europe, which is very well drawn. My recommendation would be to avoid it like the plague, especially at £7. Cheetah Soft's catchphrase is, 'Soft we're not'. Well perhaps they should realise that the average Spectrum owner isn't either

● *'After reading through 48K of instructions I felt I needed a rest. It took four or five months for the game to load and then a key display appeared on the screen and I was asked whether I would like a printout – for the cursor control keys? As suggested, I selected skill level one to get used to the rules of the game and my legions expanded across the continent rapidly. Only it's rather boring, moving legion squares and watching things turn red, and waiting for the slow response time of the computer as it wipes you out with the plague and barbarians. Feeling bored, I broke into the program and went onto skill level five leaving my original conquests from level one intact. Despite the higher skill level it's still boring due to the fact that the plague can take about half a minute to spread. One of the more boring strategy games I've encountered, and in my opinion, a rip-off at £7.'*

● 'The lengthy on-screen instructions in *Conquest* manage to make the game sound involved and exciting, although why most of these couldn't have been printed on the inlay, I don't know. Not everyone has a printer. But the game itself is slow and tedious to play. The map is very good but watching squares flashing on and off on it isn't so good. There are strategical elements contained in it to liven things up, but the more that's happening, the slower everything goes. This simply isn't the kind of programming that should be on sale today at this sort of price. In all honesty it's no better than any Mastertronic game at three times the price, and some Mastertronic games are better.'

COMMENTS

Control keys: cursors, plus three command keys
Joystick: Cursor type
Keyboard play: key layout is hardly important but responses are very slow
Use of colour: very simple
Graphics: good map, but rest very poor
Sound: none
Skill levels: 5
General rating: a poor program and a slow game which is over-priced.

Use of computer	42%
Graphics	35%
Playability	18%
Getting started	20%
Addictive qualities	13%
Value for money	15%
Overall	**24%**



TANK TRAX

Producer: **Mastertronics**
Memory required: **48K**
Retail price: **£1.99**
Language: **BASIC with machine code**

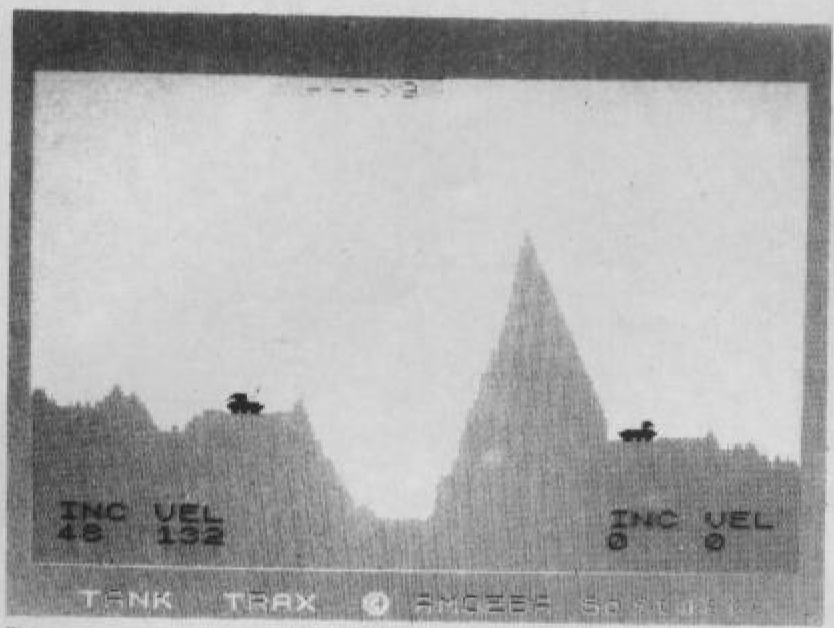
Enter the explosive battlefields of the Second World War and engage in combat with the columns of enemy tanks, it says on the inlay. First thing to note here, is the use of the plural in tanks, actually there's one tank to battle with. Well, there's two if you play this game as it should be – in two. It doesn't state on the cover that it is only a two player game, although that doesn't prevent you playing against yourself.

The option menu allows for wind variation, playing by day or night and playing in foothills or mountains. Playing at night means that the two tanks are invisible except when a shell explodes nearby. In the foothills one tank is usually lower down a hillside with a low rise between it and the other tank. In the mountains there is a giant molehill between you.

46

THE GREAT SPACE


RACE
MOVi SOFT 2



Fighting your way over the mountains in Tank Trax – you can say of the graphics, that they do their job.

Each player has an inclination and a velocity counter. The object is to get the trajectory and force of shot correct to blow up your opponent's tank. Shots which hit the mountains blow chunks out of them. The wind feature allows you to have the wind blowing at steady velocity in one direction or to change direction and force randomly. The trajectory of shots is affected by the wind.

CRITICISM

● 'Tank Trax has not got the greatest graphics ever seen etc, but it does have a certain degree of strategy and mild addictivity. I thought it was slightly above average because of its addictivity and playability. Of the graphics, you can say that they do their job.'

● *'This is one of the better games from Mastertronic and is quite playable. A fair amount of predetermination is needed to judge what angle of elevation and what velocity will be needed to blow the enemy's tank to pieces. Colour and sound have been quite well used. In all, quite playable and an average sort of game.'*

● '*Tank Trax* is not designed to keep you on the edge of your seat despite its active looking cover. It's reasonably amusing for a few minutes if you are playing against yourself, as the computer takes no part in this game. The graphics are very simple, although the tanks are quite nicely drawn and it is a very static type of game, which together with the simple graphics tends to make it tedious after a short while. I wouldn't consider this one worth its low price, although it might be suitable for very young players.'

COMMENTS

Control keys: 6/7 elevate up/down and decrease/increase velocity with key 1 to set positions, 2 to fire
Joystick: hardly necessary
Keyboard play: fairly slow
Use of colour: limited
Graphics: average
Sound: poor
Skill levels: 1
Originality: there have been better games on the theme than this
General rating: a very simple game, with limited appeal and some 'mild' addictivity.

Use of computer	60%
Graphics	44%
Playability	47%
Getting started	55%
Addictive qualities	52%
Value for money	50%
Overall	**51%**

SPECTIPEDE

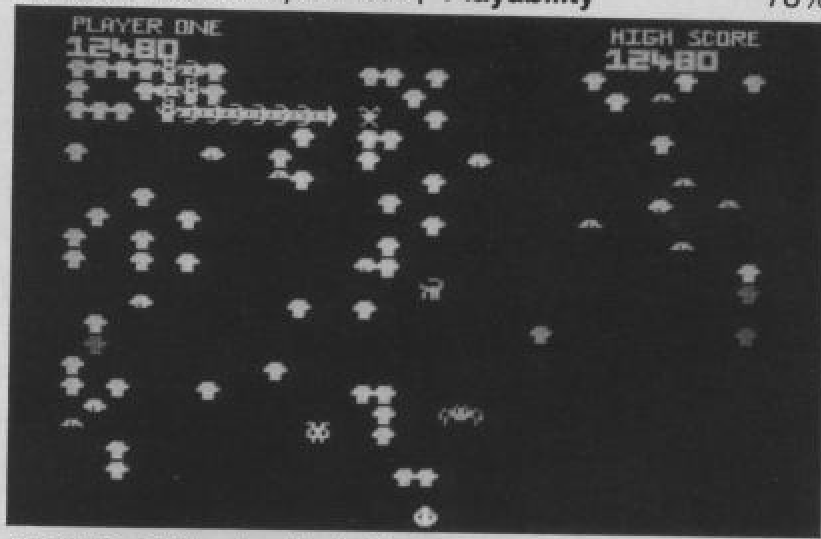
Producer: **Mastertronics**
Memory required: **16K**
Retail price: **£1.99**
Language: **machine code**

There's little to surprise in this game – the name says it all. *Spectipede* offers the full scope of the arcade original with centipedes, spiders, fleas, scorpions, mushrooms and poisonous mushrooms. On higher levels there are two centipedes to contend with. The players may move the firing base upwards for the traditional four squares to avoid segments of pede which make it to the bottom. Segments will also fall straight to the bottom if they pass over a poisonous mushroom. *Spectipede* may be played by 1 or 2 players.

CRITICISM

● 'It's odd to see that the cheapest 'Centipede' type game available for the Spectrum is also the best of all those around. Graphics are excellent, tru to the original arcade version, they are clear, very detailed, well animated and have excellent use of colour. The keys are well positioned and movement is responsive and fast. This is clearly a well thought out game with good demo, instructions and sound. It's worth every penny of £1.99 – a Mastertronic winner.'

● *'There are so many versions of the venerable creepie about that it's hard to see why anyone should want to put out any more. However, this is the cheapest around, and it's certainly up with the best and most expensive. It has all the proper details and fast moving graphics. The scorpion even flashes different colours – not much seen on the Spectrum. As to the game itself, well when it's well done, as here, 'Centipede' games are still a good, fast and ennervating shoot em up worth anyone's half hour between times.'*



A fast 'Centipede' with good graphics from Mastertronic.

● 'A good 'Centipede' can be very addictive to play, and Mastertronics have a very good version here. The only thing is that the game is so old hat now, I wonder whether anyone's that interested any more? But if you are, then at its price, this is certainly the one to buy. For once, a low price provides a good version, but I think the price also reflects the age of the game itself.'

COMMENTS

Control keys: CAPS/Z left/right, K/M up/down, L to fire; or cursor keys and 0 or 9 to fire
Joystick: Mikrogen, Kempston, Cursor type
Keyboard play: sensible keys and responsive
Use of colour: very good
Graphics: small, one-character size, but detailed and fast
Sound: very good, continuous
Skill levels: progressive difficulty
Lives: 3
General rating: we suspect a re-release, but if you haven't got a 'Centipede' type game in your collection, well worth its price.

Use of computer	75%
Graphics	66%
Playability	78%
Getting started	55%
Addictive qualities	75%
Value for money	82%
Overall	**72%**

MICRO OLYMPICS

Producer: **Database Publications**
Memory required: **48K**
Retail price:
Language: **machine code**

Database are the publishers of *Micro User*, the BBC Micro users magazine, and this program is a successful translation from their Beeb version, and their

first excursion into Spectrum territory. Olympics year seems to have resulted in a welter of track sporting simulations of the interactive sort, CRL did an Olympics program, even Automata put the Piman through the wringer. There's *Stickman Olympics* from Avalon and *Athlete* by Buffer Micro. All of them have been aiming at the popular arcade version which has the player thumping hell out of the machine (usually cracking the front glass in frustration after losing!), but this is the one that really matches up, and deserves a good placing beside Psion's *Match Point*.

There are eleven events to be entered into from the main menu, five of which come under one key press for running events. These include the 100, 200, 400, 800 and 1,500 metres. The three throwing events are Javelin, Discus and Hammer; and then there's the long and high jump and the pole vault. In each event you can compare your result with current world records.

Each event takes place against the computer with the computer (ME) going first and you (YOU) going second, although in the running events you compete simultaneously of course. Most events require the use of three keys, all of which can be user-defined at the start of each event. Running is accomplished, as in the arcade version, by hitting a left and right key as fast as possible. There is a book on Spectrum programming written specially for very young children which in its first chapter tells the child how to take care of the computer, pointing out that thumping the keys, the way those silly games players do, is bound to ruin 'Spectrum'. Needless to say, *Micro Olympics* is Database's subversive way of attempting to destroy everyone's Spectrum so you'll go out and buy a Beeb next time around!



Getting the pole position correct for the vault

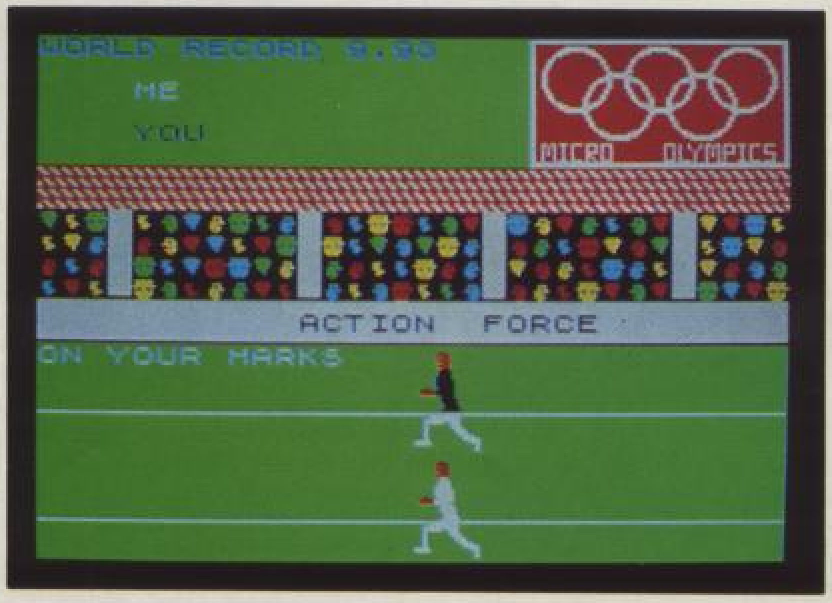
CRITICISM

● 'This is the best of the athletic type games I have seen. It's got more realism than the rest and is generally more fun. But I would like to point out that the Sinclair ZX Spectrum keyboard was not designed for rapid finger movements. Therefore I suggest that a joystick should be used – no option however, so the joystick interface must be programmable and preferably one with two independent fire buttons as these would be better than actually thrashing the joystick to death! Another point is that in true sporting style you must finish any event you start. This resulted in a lengthy key bash for the 1500 metres. Generally a good game but not designed for keyboard play.'

● *'This game is an adaptation of Track & Field, the well-known arcade game, the one where you must push and pull the joystick as hard as you can. Not surprisingly, these machines have a short existence! I found a joystick a lot easier to use with the definable keys (mine was set to Protek protocol). You really do have to move the joystick fast to get your man moving well – don't go in for the 1500 metres – you've been warned! The graphics are good and work well in most cases. The sound is good, with the crowd cheering even after a no-throw. I was a bit disappointed there was no two-player option, but a nice feature is when you throw the hammer or discus and release it at the wrong moment – the screen goes blank and cracked in the middle and says your picture will be returned as soon as possible.'*

● 'So far none of the Olympics games brought out for the Spectrum have been really worthwhile playing and were not very interactive with the player. But this version, very similar to Track & Field, should provide amusement for quite a while. The only reason for giving up might be a tired keyboard or wrist. Graphics are very well animated and colourd, general colour and sound has been put to good use. Your computer opponent is pretty good, but he can be beaten.'

... get set, go!



COMMENTS

Control keys: user-definable
Joystick: no option but most key mapped protocols can be used via UDK
Keyboard play: responsive if not violent
Use of colour: very good
Graphics: large and very well animated characters with multiple colouring used
Sound: not much, but the applause works very well, although chopped off at the end like some Monty Python effect!
Skill levels: 1
Screens: 7
Originality: a good version of the arcade game
General rating: very good, amusing, rather more than completely addictive and certainly playable.

Use of computer	79%
Graphics	76%
Playability	78%
Getting started	79%
Addictive qualities	74%
Value for money	75%
Overall	**77%**

Th

In an exciting departure from his previous games, programmer **Steve Turner** has turned his back temporarily on the evil *Seiddab* and plunged back in time to the Dark Ages, a period of black arts and magic, an age of unreason. CRASH takes a look at this new adventure which will appeal to arcade and adventure players alike. Come with us now and immerse yourself in **Hewson Consultants'**...

THE LEGEND OF AVALON

Beyond the shadows of the sun
Where countless alien realms are hung
The lord of earth reached out in dread
To claim his tribute from the dead
His horn sounds out his warning cry
The wild hunt thunders across the sky.

Mage and Lorelord combine their might
To crush the chaos of the night
With cunning craft they forge for war
The sword of power, Caliburn
The Amulet of Evermore,
The Wraithbane, rod of lore.
Upon a bier of burning gold
They set the cup of power untold.

Before the radiant host they fly
To chasms deep below the sky
Within the crystal Isle of Glass
The destiny of men must pass.
The earth is rent as powers collide,
Victors and vanquished sealed inside.
Warriors, Lorelords, all are gone –
Lost, entombed in Avalon.





The purpose of this piece is not to review *The Legend of Avalon*, the new arcade/adventure style game from **Hewson Consultants**, but to **PREview** it. At the time of writing the game is almost complete.

Steve Turner is well known for his 3D games which from the *Seiddab Trilogy*, space arcade action games, but he has felt the need to write a game along different lines and the result of several months' work is *The Legend of Avalon*. The game is an adventure played in an arcade manner. It is much more of a true adventure than, say, *Atic Atac*, in the sense that objects and their usefulness must be thoroughly investigated, gradually allowing the player a greater control over the playing environment. Some arcade skills are required to guide your character around the enormous maze-like complex of rooms and dungeons and avoid the evil spirits which will beset you during the game.

THE SCENARIO

The year is 408 AD. The crumbling empire of Rome is giving way before the onslaught of barbarian nations. Most of the Roman legions have left Britain in support of Constantine III, their self-proclaimed emperor. The 'modern' age of reason is over – the Dark Ages are settling in for a long night. **Maroc the Mage** is a lore seeker. He travels, gathering knowledge of the old ways, and is learned in the subtle arts of herbs and healing. One night while orating one of his collected rhymes, 'The Legend of Avalon', an old woman throws back her head and foretells a new age of chaos. The air chills as she speaks of the dreaded Lord of Chaos, once again leading the Wild Hunt across the night sky, stealing the corpses of the dead. She points to Maroc and tells him to go to the Isle of Glass. Taking him aside, she gives him an old oak staff with an iron head bound to one end, and two old maps. 'There is Avalon!' she cries as she laughingly leaves, pointing to a hill rising in the distance.

The fearful villagers guide Maroc to the island by way of a causeway. It is midnight. Maroc is abandoned in the darkness whilst his guides scurry away. He sits down and recalls the night's events. He doesn't have long to wait...

INSIDE AVALON

The game commences with Maroc, abandoned outside the dreaded castle and dungeon complex. A spell descends upon him and projects his astral presence within the castle. It is as an astral projection that you play the part of Maroc. Because he is in any real sense insubstantial, Maroc cannot move or carry or do anything. There are, however, many spells to be discovered which will allow Maroc to do many things. The two most important are the **Move** and **Servant** spells and these are thoughtfully provided



e Legend of Avalon

almost immediately. In fact the rod which the old woman gave to Maroc *is* the movement spell and it appears as collected in the spell scroll below the playing area. The servant spell is found in an adjacent room and the two allow Maroc to continue with his quest to destroy the Lord of Chaos.

The servant is a wraith-like sprite who can move about and collect objects for Maroc, including other spells. Only one spell may be used at a time and is selected or terminated by the fire button. For those who may be worried about their arcade skill, *The Legend of Avalon* is all joystick driven. Pressing fire selects the spell scroll and using the joystick the collected spells listed may be scrolled for selection. Pressing fire again activates the spell. If Maroc has selected the movement spell then the astral projection may move around, opening doors and collecting some things. If the servant spell is activated than Maroc remains stationary and the joystick controls the servant to do his bidding.

Objects with a useful value may be collected by the servant and placed in the sack Maroc carries on his back, but only four objects may be carried at once.

Avalon consists of some 220 locations on eight levels. These are the Gate House level which once contained barracks and guardrooms; Caverns of Doom; Mines of Despair, caves cut into an iron loade and once the source of material for the forges of the Lord of Chaos; Great Halls of the Deep, once the living quarters of the armies; Goblin Warren; Labyrinth – only wraiths occupy the lower levels; Catacombs of the Undead; and finally the place where the Lord of Chaos hides himself.



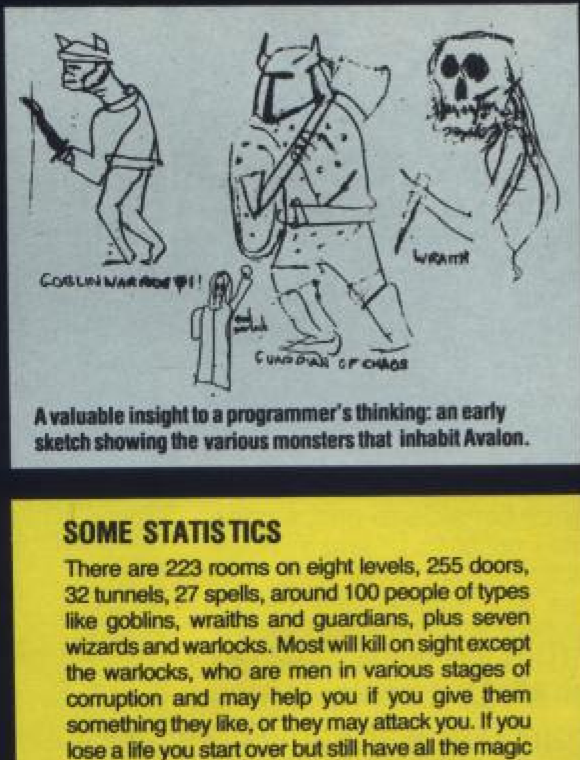
ACTING OUT THE LEGEND

The visual display, as the screen photos show, is in 3D, so positioning of Maroc or the servant is all important, especially when opening doors in a hurry. The various levels combine rooms with one or more doors, caverns and tunnels which are inhabited by spiders and bats. Contact with the tunnel walls will decrease Maroc's psychic energy, denoted in the spell scroll as a dragon's tongue of flame. There is a spell available to replenish it sparingly. During play there are various situations which decrease the level of psychic energy.

Throughout the complex there are minions of chaos that may be found lurking within the rooms and caves. Two types of goblin warrior, one with sword and another that fires arrows, a wraith with skeletal frame, the guardian of chaos, also warlocks and wizards. If Maroc encounters one of these creatures, they will move to attack his astral projection and after a short fight, drain it of energy. When this happens the old oak rod returns Maroc to the start location for another try. Here, Steve Turner has introduced a novel approach to the adventure. Instead of starting a new life with the game reset, Maroc sets out with the situation in Avalon as he left it last time. In other words the player faces the situation complete with the effects of his previous existences there.

The Legend of Avalon presents a new departure for Steve Turner, but more than that it is a new departure in the Spectrum game, a real blend of adventure and arcade. Steve has already said that he might return to the alien Seiddab again, but using this type of game format, in which case we may yet get to see what the awful Seidabb actually look like inside their creeping, crawling and flying machines. I can't wait!

All information is correct at time of going to press, but the game is still in completion stage and there may be changes made which alter some details contained in this article.



A valuable insight to a programmer's thinking: an early sketch showing the various monsters that inhabit Avalon.

SOME STATISTICS

There are 223 rooms on eight levels, 255 doors, 32 tunnels, 27 spells, around 100 people of types like goblins, wraiths and guardians, plus seven wizards and warlocks. Most will kill on sight except the warlocks, who are men in various stages of corruption and may help you if you give them something they like, or they may attack you. If you lose a life you start over but still have all the magic you have collected and people, doors, objects etc, will mostly be as you left them. The object is to penetrate to the 8th level and banish the Lord of Chaos from his earthly realm. You will need the four items of high magic to do this – read the legend carefully. The game has over 10K of object code, 12K of graphics and 10K of assorted data tables. The objects may affect the player, and some objects may be found inside other objects. Doors are opened by using the handle and moving back slightly to let the door open, but some may be invisible and some may be locked.



THE KEYB

A profile on M.C. Lothlorien

From the earliest days of the Spectrum, the name of **M. C. Lothlorien** has been synonymous with computer war games. Two of their titles, **Johnny Reb** and **Redweed**, are still firm favourites when it comes to voting on the CRASH HOTLINE. But M. C. Lothlorien's history goes back further than the Spectrum, right back in fact to the misty days of the ZX81.

CRASH took a trip north to meet the people behind the software house with the intriguing name...

THE DISH-WASHER IS LAUNCHED

For a company that has unleashed the fury of Greek, Roman and Japanese wars on us, beset us with American struggles for supremacy, and swamped us in red Martian vegetation, M. C. Lothlorien operates from a curiously sedate street in Poynton, verging on Stockport, not quite Manchester. The day of our visit was stunningly hot and sunny until we reached the outskirts of Manchester when, of course, it began to rain. It was the day before Imagine collapsed – portentous weather perhaps. But Lothlorien should be used to portents since their earlier games were entrenched in a period of history well used to reading auguries and divining the meaning behind omens.

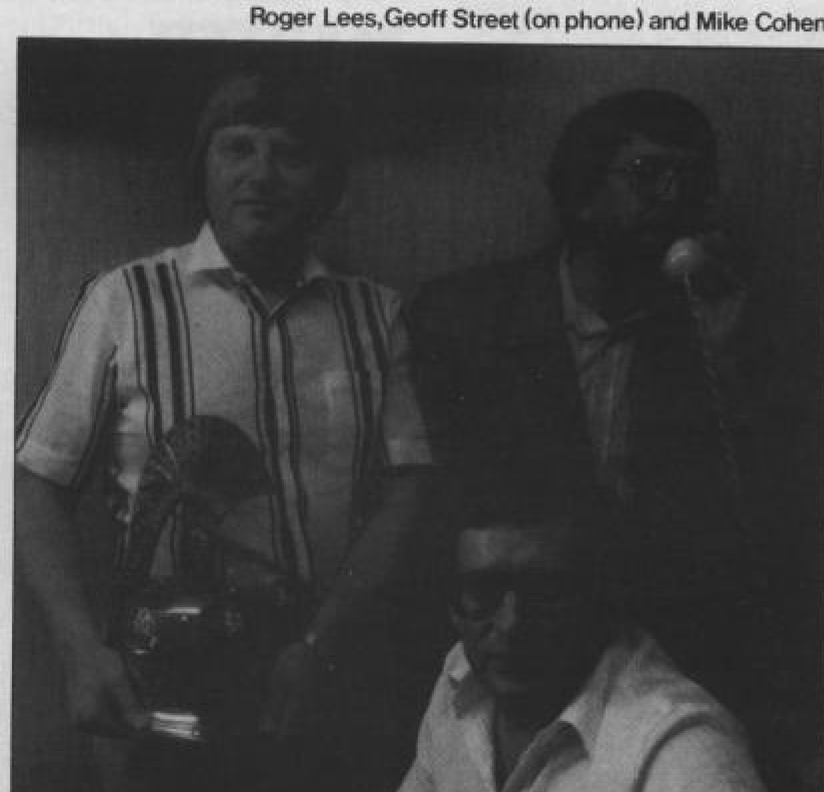
As if to underline this point, the first object to catch the visitor's eye in the outer offices is the large bronze Grecian warrior's helmet – the living flesh, so to speak, behind Lothlorien's well-known logo.

Who is M. C. Lothlorien and why the unusual name are two questions with one long answer. There are three partners, **Mike Cohen**, **Roger Lees** and **Geoff Street**. Geoff is a relative newcomer but he has known the others from when they were all at school together. Both Mike and Roger came to the software field from a background of finance and Mike has some legal experience, being a student barrister. For Mike the rot set in around Christmas 1981 when his wife bought him



BOARD WARLORDS

Roger Lees, Geoff Street (on phone) and Mike Cohen



a ZX81 computer. At least, that's Mike's story. Roger Lees tells it slightly differently; Mike bought the computer as his wife's present to him for Christmas. The truth is lost to history, as was Mike. History was and remains a major passion as it does for Roger. War games is another. The computer seemed to offer wonderful opportunities for developing war games and Mike set himself to learn BASIC programming, and the first result was *Tyrant of Athens*.

"Lots of people who looked at the result thought it was pretty good," says Mike. "They said I ought to try and sell the game."

The obvious choice of action was to take out a small advert for mail order and almost immediately an argument sprang up between Mike and his wife, who thought £95 for a quater page in 'Your Computer' would be throwing money away. Geoff Street, who joined the team long after the incident smiles as Roger recalls the battle. "The game bacame known as *Dishwasher* because it was dangled as a bribe: 'If it makes any money I'll buy you a dishwasher out of the profits'."

Mike won the argument. "We expected 20 replies," Mike goes on, "which would have covered the cost of the ad. We got 200 replies within two weeks!"

Fired with enthusiasm, Roger bought himself a ZX81 as well and began work on *Samurai Warrior* and *Warlord*. They started placing quater pages together in several magazines and business expanded. Of course it was just a sideline, almost a hobby, and at the time Mike Cohen was trading under the name of M. C. Associates Trading while Roger Lees was using a long-established family trading name – Lothlorien Trading. Later, when the Spectrum arrived, they realised that producing games was a full-time occupation and thus M. C. Lothlorien was formed between them.

As Lothlorien expanded it became clear that they needed someone else and last summer Geoff Street joined the partnership. Geoff has considerable programming experience having worked for some years previously in the commercial field as a jet-setting trouble-shooter for banking interests around the world, flying to exotic locations like Hong Kong and the States bug shooting.



WAR GAMES AND PRESENTATION

When the Spectrum opened up the home computer market in a big way, Lothlorien transferred the war games to the new machine and added *Johnny Reb* to the Spectrum catalogue. This strategy war game based on events in the American Civil War has proved enduringly popular, although by the standards of later games like the *Confrontation* series of scenarios, it is very simple.

Talking about *Johnny Reb* brought up the subject of reviews for their games. We mentioned that Lothlorien war games hadn't on the whole received very kindly reviews from CRASH, largely due to a lack of reviewers sympathetic to the type. Roger says, "There is a problem. Generally the magazines aren't into war games and we do expect mixed reviews, who doesn't? But we see good and bad ones, and those where the reviewer clearly didn't understand the game at all. We never write in to comment on reviews though."

We did remark that despite less than enthusiastic reviews in CRASH, the Lothlorien war games tend to sell consistently well on mail order. "Well I think that's true," says Geoff. "Retailers find that they have a sales explosion on a new game but if they haven't got rid of it within a month they're stuck with the stock. But that isn't the case with ours – the war games that is – and they say they can sell them for much, much longer."

Tackled on the fact that the type and presentation of the graphics used in war games might put off gamers used to arcade-style graphics, Mike says, "Maybe we let ourselves down over the presentation of games, preferring to let the game idea sell itself. Now we want to concentrate more on presentation and execution. We're very conscious of the need to improve on that side of things and we're also in a position to dictate the state of the art in our own area."

Roger Lees adds, "As machines get bigger, we believe it is absolutely essential that the game element is developed. If you pinch too much for graphics you can spoil the game, and you also have to make sure that the graphics don't get in the way of playing the game."

Mike's feelings about Lothlorien's position to dictate the state of the art in war games is echoed by a young programmer who works with them, **Steve Hughes**. He also thinks they need to improve the look of the games, and is currently working on one for the C64, a game which he describes loosely as, "Sophisticated like a Lothlorien war game but with a raised visual standard."


Steve Hughes

ACTION-MASTER

With M. C. Lothlorien established as a full-time working software house, games started coming in for consideration from hopeful programmers. "We get good and bad stuff through the door," says Roger, "but we haven't always got the time to check it out! It's easier with arcade games. After twenty minutes or so, you know whether you like it or not. Not so with war games and adventures (very much the problem reviewers have). Sometimes we have to make a favourable response to the author before it's all properly played through."

In addition to the range of war games, Lothlorien have added adventures and arcade games. The first two arcade games were *Bedlam* and *Beetlemania* by Steve Hughes. Originally these were marketed by Steve's own firm **A.W.A.** Steve, who is 24, ran the company with a partner, an airline pilot, who has now retired from the software business. In addition to the two games they marketed *Orion*, a monitor/assembler for the Oric computer. At the time Lothlorien were doing some Oric versions and wanted *Orion* so they went to visit A.W.A. in their Manchester offices. Steve says that things were not going too well with A.W.A. but Mike Cohen and Roger Lees were impressed by the arcade games. A deal was struck and Lothlorien repackaged *Bedlam* and *Beetlemania* and released them under their new **Actionmaster** banner.

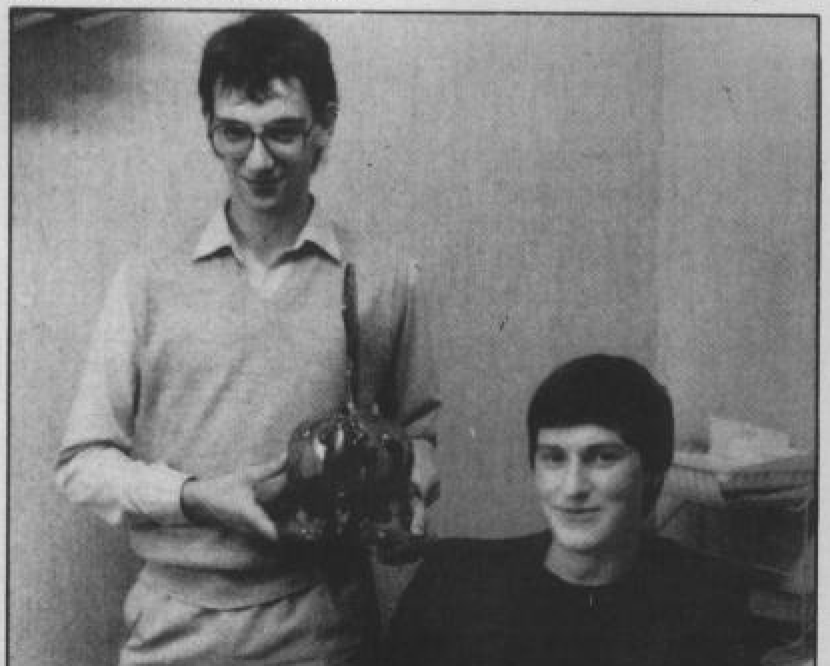
"I was very chuffed with the games at the time," says Steve. "But they're very dated now. *Jetpac* came out at the same time as *Beetlemania* and put a stop to that sort of game."

Steve Hughes is not a full-time employee, preferring to remain freelance, but everything he writes is marketed by Lothlorien and he spends a lot of time in their offices working. The latest release is *Chock a Block Charlie* for the C64. "I don't have a favourite computer. I like chopping and changing between the Spectrum and the C64." At 24 is he over the hill as a programmer of games? "No!" he replies, shocked at the question. Has he any programmer heroes? "There's so many good programmers around now – hard to choose one. Don Priestly perhaps (*Maziacs*) – and he's in his forties!"

Steve blames Sir Clive Sinclair for his introduction to computers (who doesn't!) and programming. He won a competition in the Manchester Evening News sponsored by Sir Clive. The first prize was a ZX81. "So the rot set in and the eyesight's getting worse," he says cheerfully.

Unlike Steve, **Simon Cobb** is a full-time Lothlorien employee. 17-year-old Simon was responsible for *Grid Patrol*, the game that broke a CRASH joystick! The first version of *Grid Patrol* he sent to Hewson Con-

Simon Cobb and Steve Hughes





sultants and they renamed it *Di-Lithium Lift.* "I wrote a second, more complicated version of it but they said it was too similar to *Di-Lithium Lift.* However, Lothlorien were interested. Luckily they wanted to expand their in-house programming and they offered me a job. I took it!"

Before *Grid Patrol*, Simon had written a game for the Aquarius called *Astranoids.* "I had a friend who worked on the Aquarius for C.C.I. and I got mixed up in it. The game wasn't much good but I wrote another one for the Spectrum. After months, C.C.I. paid me £100 for it, but it wouldn't work on series 3 Spectrums. I made some corrections and sent it back but it never got released anyway."

Simon is now at work on a new arcade shoot em up provisionally titled *Lifeline.* Simon showed us some screens of what looked like a hard and graphically attractive game. It has three phases with 14 screens in all. No release date yet.

AFTER THE BRIDGE-HEAD

M. C. Lothlorien are in the midst of expansion plans. Including the three partners, there are now ten people working together in offices bursting at the seems. More space is available to them soon and they can't wait to get into to. Even as we were taking photographs another young hopeful programmer arrived for an interview with Geoff.

Mike Cohen says, "We're planning to release three new titles each month for eight months of the year, plus translations of existig games to other machines."

On the list is *Redcoat*, a war game set during the American War of Independence. Described as a cross betwen *Johnny Reb* and *Confrontation*, it will accommodate different scenarios like the latter game but is designed to be much simpler in concept and playability like the former.

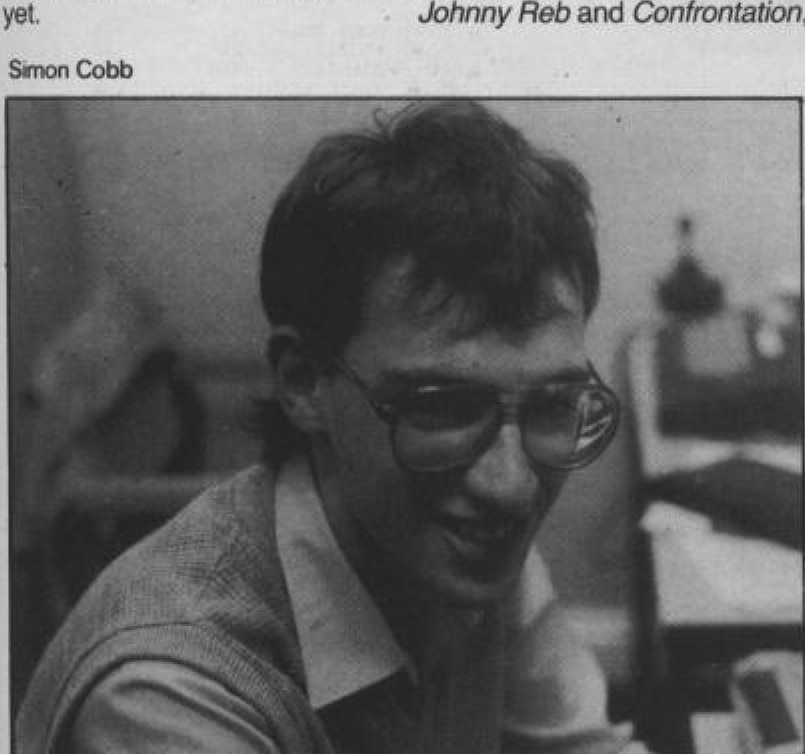
Another new game is *Masters of Serebal* (its working title) from the same author as *Special Operations*, a strategy/adventure role playing game with arcade elements. There is also an interesting project, two separate games based on the Battle of the Bulge. Written by two different authors, the games look at the battle from both points of view, German and Allied. "We're looking at how to present them both," says Roger.

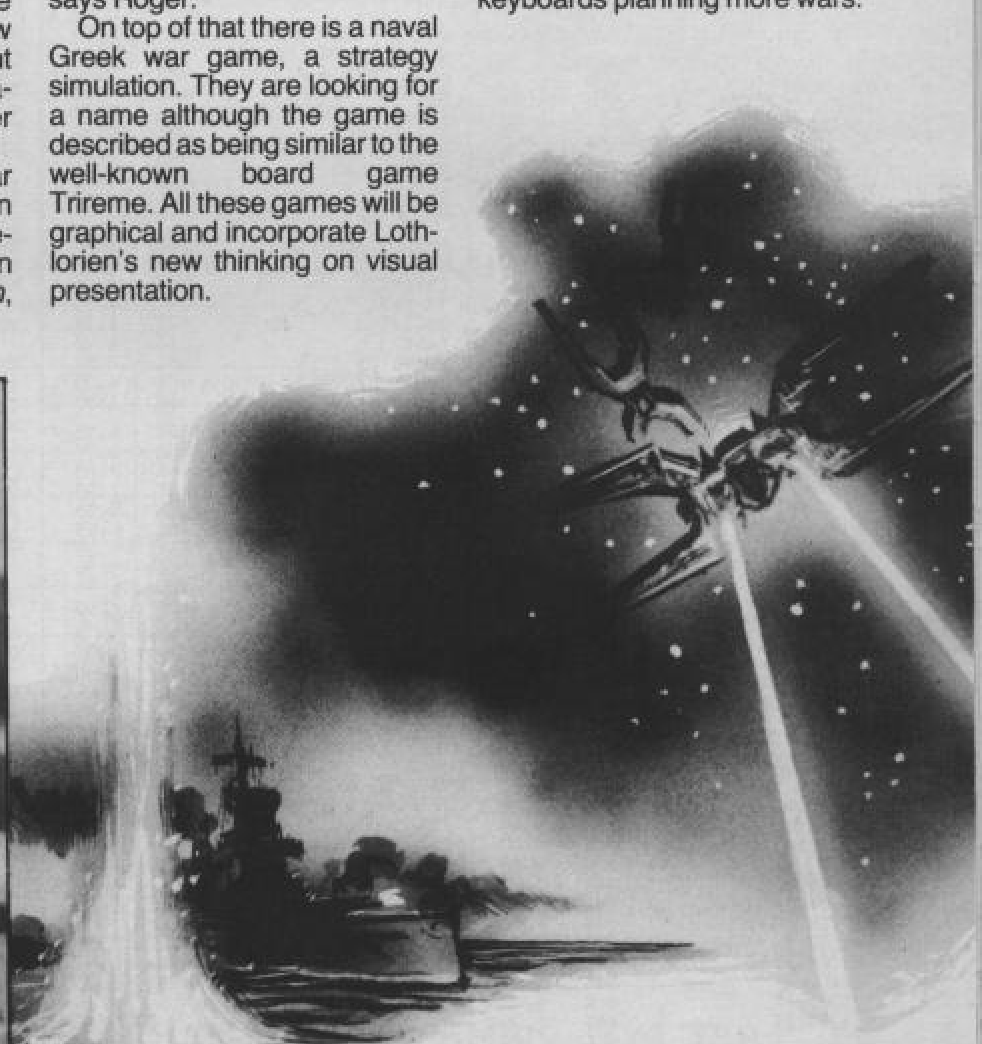
On top of that there is a naval Greek war game, a strategy simulation. They are looking for a name although the game is described as being similar to the well-known board game Trireme. All these games will be graphical and incorporate Lothlorien's new thinking on visual presentation.

As we left Lothlorien to the rest of their busy day, the rain came down afresh and stayed with us all the way to the M6. As soon as the car turned south the rain stopped and the sun came out. It was Roger Lees who explained the phenomenon. "Everyone says it rains more in Manchester than anywhere else in England, but it isn't true. We get just the same amount of rain as anyone – it just does it more slowly and for much longer in Manchester."

Whatever the weather, it's doubtful the staff of M. C. Lothlorien have much time to worry about it – they're too busy at the keyboards planning more wars.

Simon Cobb





CRASH

SPECIAL OFFER

£1 off any order worth more than £10 only from the games listed below.

£2 off any order worth more than £20 only from the games listed below.

Please use our normal mail order coupon and indicate with an S in top right corner that you want to profit from this SPECIAL DEAL.

ABACUS		
SENTINEL	16K	5.95
PROTEUS	16K	5.95
AVENGER	16K	4.95
FIREFLASH	16K	5.95
GALACTIC WARRIORS	16K	5.95
SUPER DIGGER	16K	4.95
ABBEX		
FAUSTS FOLLY	16K	5.95
ETX	16K	5.95
COSMOS	16K	5.95
KRAKATOA	48K	5.95
ABERSOFT		
THE WIZARDS WARRIORS	48K	4.95
ADDICTIVE GAMES		
FOOTBALL MANAGER	48K	6.95
ANIROG		
TINY TOT'S SEVEN	16K	4.95
FROGRUN	16K	5.95
SLAP DAB	16K	5.95
MISSILE DEFENCE	16K	5.95
GALACTIC ABDUCTORS	16K	5.95
XENO II	48K	5.95
KONG	48K	5.95
MOON BUGGY	48K	5.95
ARCADE		
GRIDRUN + PONTOON	48K	5.50
RAIDERS O.T.CURSED M.	48K	5.50
THE DETECTIVE	48K	5.50
LAST SUNSET F. LATTICA	48K	5.50
BUBBLE TROUBLE	48K	5.50
THE PRIZE	48K	5.50
ARTIC		
PLANET OF DEATH	16K	6.95
SHIP OF DOOM	48K	6.95
INCA CURSE	48K	6.95
ESPIONAGE ISLAND	48K	6.95
GOLDEN APPLE	48K	6.95
GROUND ZERO	48K	6.95
INVASIONFORCE	16K	4.95
INVADERS	16K	4.95
GALAXIANS	16K	4.95
EARTH DEFENCE	16K	4.95
MIILIMON	16K	4.95
SNAKE	16K	4.95
REFLECTIONS	16K	5.95
I'M IN SHOCK	16K	4.95
SANTA	16K	5.95
ROAD RACERS	16K	4.95
COSMIC DEBRIS	16K	4.95
DIMENSION DESTRUCTORS	48K	5.95
3D COMBAT ZONE	48K	5.95
BEAR BOVVER	48K	6.95
MONKEY BIZNESS	48K	6.95
DEATHCHASE 5000	48K	6.95
BLABY		
GOLDDIGGER	48K	4.95
BARMY BURGERS	48K	5.50
DODO	48K	5.50
KILLER KONG	48K	5.50
PLUGGIT	48K	5.50
GOTCHA	48K	5.50
CASEY JONES	48K	5.50
CHOPPER RESCUE	48K	5.50
BOSS		
TURBODRIVER	48K	5.95
BRITANNIA		
HOME RUNNER	48K	4.95
STOMPING STAN	48K	4.95
GRAND PRIX DRIVER	48K	6.95
BYTEWELL		
HIDDEN CITY	48K	5.95
CCI		
TOBOR	48K	5.95
ED-ON	16K	5.95
CHUCKMAN	48K	5.95
3D STAR WARS	48K	5.95
GRID BUG	16K	5.95
GAMES PACK 1	48K	5.95
GAMES PACK 2	48K	5.95
GAMES PACK 3	48K	5.95
CCS		
PLUNDER	48K	6.00
SMUGGLER	48K	6.00
GANGSTERS	48K	6.00
POLARIS	48K	6.00
ABYSS	48K	5.00
CAMELOT	48K	5.00
PACIFIC WAR	48K	6.00
BATTLE 1917	48K	6.00
WAR 70	48K	6.00
STOCKMARKET	48K	6.00
MANAGE	48K	6.00
OLIGOPOLY	48K	6.00
SOLITAIRE	48K	6.00
BYTE	48K	5.00
UNITED	48K	6.00
BRITISH LOWLAND	48K	6.00

CDS MICROSYSTEMS		
GOBBLE A GHOST	16K	5.95
CATERPILLAR	16K	5.95
3D PAINTER	16K	5.95
BOZY BOA	16K	5.95
POOL	16K	5.95
SPECTRUM SAFARI	48K	5.95
MAGIC MEANIES	16K	5.95
WINGED WARLORDS	16K	5.95
TIMEBOMB	16K	5.95
FRENCH IS FUN	48K	5.95
GERMAN IS FUN	48K	5.95
CRL		
ZARAKS	16K	4.95
ALIEN MAZE	16K	5.95
CAVEMAN	16K	4.95
LUNAR RESCUE	16K	4.95
GALACTIC PATROL	16K	5.95
STARGAZER SECRETS	48K	5.95
TESTMATCH	48K	5.95
DERBY DAY	48K	5.95
JACKPOT	48K	4.95
HANDICAP GOLF	48K	5.95
RESCUE	48K	5.95
WOODS OF WINTER	48K	6.95
OMEGA RUN	48K	5.95
GLUG GLUG	48K	5.95
CRYSTAL COMPUTING		
COSMIC GUERILLA	16K	5.50
HALLS OF THE THINGS	48K	7.50
THE DUNGEON MASTER	48K	7.50
ROMMELS REVENGE	48K	6.50
INVAS.OF THE BODYSN.	48K	6.50
THE ISLAND	48K	7.50
BUGBLASTER	16K	7.50
CYBER ZONE	48K	7.50
DKTRONICS		
ROAD TOAD	16K	4.95
METEOROIDS	16K	4.95
INVADERS	16K	4.95
3D TANX	16K	4.95
DICTATOR	48K	4.95
JAWZ	16K	4.95
SPAWN OF EVIL	16K	4.95
FRUIT MACHINE	48K	4.95
GOLDMINE	16K	4.95
HARD CHEESE	16K	4.95
MAZIACS	48K	6.95
TROM	16K	5.95
TRAMIX	16K	4.95
JUMBLY	48K	6.95
SLICKER PUZZLE	48K	6.95
SPEED DUEL	16K	5.95
APPLE JAM	16K	5.95
2003 A SPACE ODDITY	48K	4.95
STARTREK 3000	48K	4.95
ZIG ZAG	48K	6.95
DORCAS		
THE ORACLE'S CAVE	48K	7.95
FANTASY		
VIOLENT UNIVERSE	16K	5.50
THE BLACK HOLE	16K	5.50
PYRAMID	48K	5.50
DOOMSDAY CASTLE	48K	6.50
BEAKY & THE EGGSNATC.	48K	6.50
GAMES MACHINE		
SUPERSNAILS	16K	5.95
BARRELDROP!	48K	5.95
SKULL	48K	6.95
HEWSON		
HEATHROW ATC	16K	7.95
NIGHTFLITE II	16K	7.95

3D SPACE WARS	16K	5.95
KNIGHT DRIVER	48K	5.95
DI-LITHIUM LIFT	16K	5.95
3D SEIDDAB ATTACK	16K	5.95
3D LUNATTACK	48K	7.95
QUEST	48K	5.95
FANTASIA DIAMOND	48K	7.95
IMAGINE		
ARCADIA	16K	5.50
AH DIDDUMS	16K	5.50
SCHIZOIDS	16K	5.50
MOLAR MAUL	16K	5.50
JUMPING JACK	16K	5.50
ZZOOM	48K	5.50
ZIP ZAP	48K	5.50
STONKERS	48K	5.50
ALCHEMIST	48K	5.50
PEDRO	48K	5.50
COSMIC CRUISER	48K	5.50
B.C.BILL	48K	5.50
LOTHLORIEN		
ROMAN EMPIRE	16K	5.50
TYRANT OF ATHENS	16K	5.50
SAMURAI WARRIOR	16K	5.50
WARLORD	48K	5.50
PRIVATEER	48K	4.50
REDWEED	48K	5.50
JOHNNY REB	48K	5.50
PARAS	48K	5.95
RED BARON	48K	5.95
CONFRONTATION	48K	7.95
DREADNOUGHTS	48K	5.95
SPECIAL OPERATIONS	48K	5.95
BEDLAM	16K	5.95
BEETLEMANIA	16K	5.50
MICROMOUSE	16K	5.95
LOTUS SOFT		
LORD HARRY/LADY HAR.	16K	5.50
HAWKS	16K	5.50
BULL TABLES	16K	5.50
SPECTRUM BOWLS	48K	5.50
MICROMANIA		
CYBOTRON	16K	5.95
GHOST'S REVENGE	16K	5.95
TUTANKHAMUN	48K	5.95
PENGY	16K	5.95
INVASION FORCE (STACK)	48K	5.95
MICROMEGA		
HAUNTED HEDGES	16K	6.95
LUNA CRABS	16K	6.95
3D DEATH CHASE	16K	6.95
MIKROGEN		
SPACE ZOMBIES	16K	5.95
COSMIC RAIDERS	16K	5.95
SCRAMBLE	16K	5.50
MINES OF SATURN	16K	5.95
GALAKZIONS	16K	5.95
TEMPEST	16K	5.85
MASTERCHESS	48K	6.95
SORCERERS CASTLE	48K	5.50
MAD MARTHA I	48K	6.95
MAD MARTHA II	48K	6.95
NEPTUNE		
STARTREK + MUNCHMAN	48K	5.50
OCEAN		
ROBOTICS	16K	5.90
ARMAGEDDON	16K	5.90
DIGGER DAN	16K	5.90
TRANSVERSION	16K	5.90
MR WIMPY	48K	5.90
KONG	48K	5.90
HUNCHBACK	48K	5.90

ROYAL BIRKDALE	48K	5.90
POGO	48K	5.90
ESKIMO EDDIE	48K	5.90
CAVELON	48K	5.90
ROMIK		
3D MONSTER CHASE	16K	6.99
COLOUR CLASH	16K	7.99
SHARK ATTACK	16K	5.99
GALACTIC TROOPER	16K	5.99
SPECTRA SMASH + BREAK.	16K	6.99
R & R		
STAR TREK	48K	4.95
SPECTRUM GOLF	16K	3.75
GNASHER	16K	4.95
CHOPPER X1	16K	5.50
TITANIC	48K	7.95
SEVERN		
QUINCY	48K	4.95
MORIA	16K	4.95
JOGGER	16K	4.95
ENCOUNTER	48K	5.95
SILVERSOFT		
ORBITER	16K	5.95
GROUND ATTACK	16K	5.95
MUNCHER	16K	5.95
STARSHIP ENTERPRISE	48K	5.95
SLIPPERY SID	16K	5.95
CYBER RATS	16K	5.95
ROBOT RIOT	48K	5.95
SAM SPADE	16K	5.95
FREEZ BEES	48K	5.95
BRAIN DAMAGE	16K	5.95
ARMAGEDDON	16K	5.95
EXTERMINATOR	16K	5.95
MISSION IMPOSSIBLE	16K	5.95
WORSE THINGS H.A.SEA	48K	5.95
SIMON W HESSEL		
INHERITANCE	48K	6.95
GREAT BRITAIN LTD	48K	6.95
SINCLAIR		
EMBASSY ASSAULT	16K	4.95
HUNGRY HORACE	16K	5.95
HORACE & T.SPIDERS	16K	5.95
HORACE GOES SKIING	16K	5.95
FLIGHT SIMULATION	48K	7.95
CHEQUERED FLAG	48K	6.95
MUSIC MASTER	48K	9.95
MAKE A CHIP	48K	9.95
CYRUS IS CHESS	16K	9.95
SCRABBLE	48K	15.95
SOFTWARE PROJECTS		
MANIC MINER	48K	5.95
ORION	48K	5.95
THRUSTA	48K	5.95
PUSH OFF	48K	5.95
OMETRON	48K	5.95
MC KENSIE	48K	5.95
TRIBBLE TROUBLE	48K	5.95
JET SET WILLY	48K	5.95
SUNSHINE		
BLIND ALLEY	16K	4.95
CRUISING	16K	4.95
ANDROIDS	16K	5.95
GALAXY ATTACK	48K	5.95
THORN EMI		
GOLD RUSH	16K	6.95
VOLCANIC PLANET	16K	6.95
BLOCKADE RUNNER	16K	6.95
RIVER RESCUE	48K	6.95
ROAD RACER	48K	6.95
ORC ATTACK	48K	6.95
TOWER OF EVIL	48K	6.95
ULTIMATE		
JETPAC	16K	5.50
PSSST	16K	5.50
COOKIE	16K	5.50
TRANZAM	16K	5.50
LUNAR JETMAN	48K	5.50
ATIC ATAC	48K	5.50
VISIONS		
STAR WARRIOR	16K	6.95
SNOOKER	16K	8.95
RAPEDES	16K	5.95
SHEER PANIC	16K	5.95
MOON BUGGY	16K	6.95
1994	48K	6.95
PITMAN SEVEN	48K	6.95
ARCTURUS	48K	6.95
VORTEX		
ANDROID ONE	16K	5.95
ANDROID TWO	48K	5.95
WORKFORCE		
THE WINGED AVENGER	16K	5.00
JAWS REVENGE	16K	5.00
DO NOT PASS GO	48K	6.95
DOOM BUGS	16K	5.50
THE ARCADE SAMPLER	16K	6.50



CRASH MICRO GAMES ACTION ORDER FORM

Telephone Ludlow (0584) 5620.

Please send me the following titles: Block capitals please!

Title	Producer	Amount

Name. . . . .

Subscriber No, if applicable

Address. . . . .

. . . .

. . . .

. . . .

Postcode . . . .

SPECIAL DISCOUNTS

£1 OFF ANY ORDER WORTH MORE THAN £20

50P OFF ANY ORDER WORTH MORE THAN £10

Sorry – only ONE voucher per order!

All prices are as quoted under review headings and include VAT. Crash Micro Games Action make no charge for postage and packaging. Customers in Europe should add 50p per item for post and packing. Outside Europe, please write first so that we may advice on postage rates.

Please make cheques or postal orders payable to 'CRASH MICRO'. From Europe we can accept Sterling cheques or Girocheques.

Sub Total: £

Less Discount £

Total Enclosed £

CRASH MICRO, FREEPOST *(no stamp required)*, **LUDLOW, SHROPSHIRE SY8 1BR**

ADVERTISEMENT



YOU'VE READ ABOUT THE SOFTWARE –

NOW PLAY IT!

CRASH is the only magazine to offer you a direct link between reading about software and playing it! Forget hours of fruitless hunting in shops for that extra special game you read about and want – **and want now. CRASH Mail Order** will move stars and planets (even the 8.15pm from Paddington) to get you any of the brill (and even not-so-brill) software from the big (and even not-so-big) software houses reviewed in these pages. Because **CRASH** believes that you **reading** about software is only second best to you **playing** the real thing – and forming your own opinion. Bazoola software and meep software – don't just believe us – **see**! Order any games, adventures, utilities, simulations and educational software mentioned (and not-so-mentioned) in **CRASH** with the order form later in this issue.

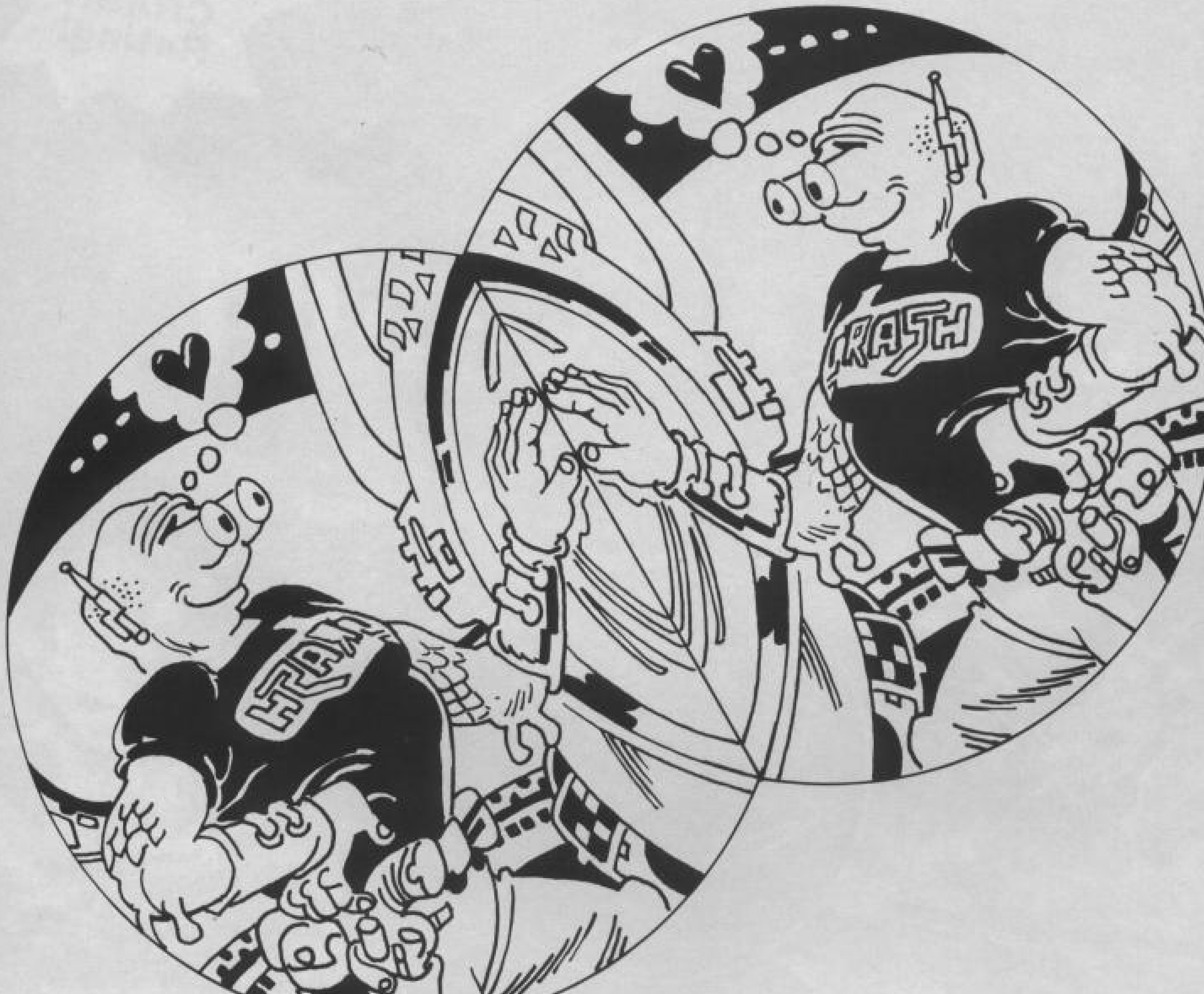
CRASH – SPECTRUM SOFTWARE



RE HEAVEN AT YOUR FINGERTIPS

THE MONTHLY CRASH QUIZ

After last month's brain teaser, here's a much simpler quiz. Spot the Differences also seem very popular, but to make things a little harder this time, you have got to spot the differences between **two reversed pictures**. They are identical (apart from the 12 differences!) but one is the mirror image of the other (and that particular difference DOES NOT COUNT!). Ring the differences on one of the drawings (or a photocopy if you prefer) and send them into: **THE CRASH QUIZ, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB**, to reach us no later than **27th September**.



RESULTS OF THE JULY QUIZ

In July we gave you a crossword and published the answers last month, so here are the winners. **Robert Leedham**, Amersham, Bucks; **Graham F. Cresswell**, Rugby, Warwicks; and **Christopher Thomas**, Upton, Cheshire. They each receive £25 worth of sotfware of their choice and a CRASH T-shirt. The three runners up each get a T-shirt, and they are: **Jerry Muir**, Bolton, Lancs; **R.M. Evans**, Chappleton, Sheffield; and **Matthew Platts**, Malmesbury, Wilts.

ANSWERS TO THE AD ASTRA COMPETITION IN THE JULY ISSUE

1. To The Stars
2. The motto belongs the the R.A.F.
3. ...the stunning graphics
4. You get 6 lives
5. Large planet(oid)s or asteroids
6. The words 'Ad Astra' appeared 4 times
7. A Gargoyle is a piece of medieval statuary (B)

Winners will be receiving their games from Gargoyle direct. A list of the 100 winners is available on application to CRASH and will be sent if we receive a stamped addressed envelope.

STACK LIGHT RIFLE WINNERS

As promised, here are the five winners of the Stack Light Rifle Competition in issue 5 (June): **Alan Ireland**, Currie, Midlothian; **S. Huckvale**, Coventry; **Paul Mogford**, Llandevaud, Gwent; **Andrew Higginson**, Isleworth, Middx; and **A.E. Smith**, Formby, Merseyside. In all cases there was no need of the tie break.

COMCOCTION

Lloyd Mangram plugs in programs and plays



The latest spate of joystick interfaces has brought a multitude of different programming concepts on the market ranging from the software selectables to the personalised card systems.

As the Sinclair owner is aware, the Spectrum does not provide a dedicated joystick port (rather odd for a games computer), and the add-on market has been quick to provide various solutions to the problem. Before this however, the software houses have had to make do with the keyboard as a playing ground. The multitude of key combinations used for each and every game meant that whoever would bring out a joystick which catered for all these games, would have to provide a system which used the input port address of the keyboard and could link any of the keyboard keys to any of the joystick controls. With five joystick controls and 40 keys this meant an astonishing amount of combinations and it is with no surprise that some manufacturers chose early on to create their own interface standard, leaving it to the software houses to develop compatible software.

The earliest and most established is Kempston, using a different input port address to the keyboard (input address 31). Fuller went along similar lines, but selected input port 127. Where Kempston was accepted as the joystick standard, the Fuller system suffered from the lack of support from most software houses (execpt Imagine).

AGF opted for part compatibility by using the keyboard port address and linking the joystick controls to the cursor keys and 0 for fire button. This was met with success too, and the cursor key joysticks (mostly AGF and Protek) developed into a standard.

Much of the software catered now for the Kempston and cursor joysticks and the last thing needed was another standard. Promptly Sinclair launched the ZX Interface 2 which was to provide the Spectrum with two joystick ports and a games cartridge interface to complete the arcade image of the computer. You guessed, a new Sinclair standard was created, with the joysticks operating off specific keys, one off the top right half-row, the other off the top left half-row of the keyboard. Although technically a good idea (each joystick requiring only one keyboard address for fast machine code access), it nonetheless created a further confusion on the market and the software houses had to provide a whole plethora of compatibilities. In exasperation, some programmers provided a soft option by including a 'select your own keys' routing within the program. A new interface was needed, which enabled all the games to be played with a joystick and which provided the user with a fast and easy programming system.

Frel Limited purport to have found the ideal solution with their **COMCON interface**...

THE HARDWARE

The COMCON comes in a brightly coloured package and impresses by its sheer size of 120mm width and 135mm depth with a sleek profile of 19mm excluding the extension port chimney stack.

Most of the top stack is taken up by a 4 × 10 matrix of two-pin connectors. This matrix represents the Spectrum keyboard and is annotated accordingly with a white legend.

Protruding at the rear are six two-core cables with Molex receptacles which can be plugged into any of the 40 matrix positions. These six cables repre-

COMCOCTION

sent the six joystick controls (4 direction and two fire) and are annotated at the entry point of the cables to the enclosure.

To the rear right is a 9-pin D connector plug, which will accept any Atari compatible joystick.

A vertical extension port is provided at the front of the unit and is protected by a collar which blends in nicely with the Spectrum's rear enclosure. This extension port provides the possibility of connecting the Currah µSpeech unit or the Alphacom printer, both do not have extension ports (the Alphacom only provides a ZX81 extension port).

Overall the unit looks tidy and professional, the injection moulded enclosure being of good quality and the connectors rugged enough to survive any ill treatment from game addicts.

OPERATION

COMCON operates parallel to the keyboard using the same input port. Each joystick function is represented by a cable which can be plugged into any key position of the matrix. So if the game requires key Q for up movement, the 'up' function cable is plugged into the position marked Q. Simple!

Naturally if the program caters for diagonals, the joystick will automatically provide these as the diagonal movement of the joystick simply is the equivalent of pressing two keys simultaneously on the keyboard. As the interface operates on the same input port as the keyboard, there is no problem of incompatibility as regards to other peripherals. It goes to say that joystick and keyboard can be operated together without any electrical collision and that therefore multikey games such as *Flight Simulation* etc can be enjoyed with the joystick and keyboard combined.

COMCON also provides two independent fire or special function actions (six cables). Frel Ltd market for this purpose a modified **Quickshot 2+2** joystick, which incorporates two independent trigger buttons on the grip (F1 = index finger operated button, F2 = thumb operated button) at the expense of the very little used Rapid Fire option. Also available from Frel is a special Flightlink joystick with two independent fire buttons, which also makes full use of the fire actions on COMCON. The extra fire function proves to be very useful with arcade games (*Cavern Fighter* or *Full Throttle* should prove its potential!).

Any Atari compatible joystick can be connected to COMCON (Kempston, Quickshot 1, Sumlock etc) although the second fire option will not be available.

The review team of CRASH has been operating COMCON for over two months and has had no compatibility problems so far. The major benefit of the unit is its ease of programming, beating any other system for sheer simplicity and speed. The possibility of programming the joystick functions during loading or even in the middle of play is invaluable. In fact most of the times the game is loaded first and the programming is accomplished after reading the operating keys in the screen instructions.

COMCONCLUSION

COMCON proves to be a perfect solution to the problem of joystick incompatibility with the Spectrum. Any program can be catered for. At **£19.95** the unit is very good value for money. The choice is left to the Spectrum owner, whether to go for a two or three standard interface such as the RAM Turbo or Kempston (catering for Sinclair, Kempston and Cursor) with the added bonus of the cartridge port, or to be truly independent from any standard and gain an extra fire function!

EPILOG

Frel has informed CRASH that the latest Cambridge Computing joysticks have a revised pinout on the D connector affecting the 2nd fire action. Frel provides the service of modifying the COMCON interface to suit the Cambridge joystick 2nd fire function at a charge of £3 all inclusive.

At the same time the company offers to upgrade any Quickshot 2 joystick to the Quickshot 2+2 spec with two independent fire actions with the loss of Rapid Fire at a total cost of £4 all inclusive.



SPECTRUM'S ADVANCED KEYBOARD

HI>>QUALITY

■ The **LO>>PROFILE** professional keyboard is the ultimate upgrade for your Spectrum. By replacing its existing keyboard with a high quality **LO>>PROFILE**, you give this world-beating computer the keyboard it deserves.

■ The **LO>>PROFILE** is a full size QWERTY keyboard with full-travel positive-action keys for super-fast entry of programs and data. Presented in an ultra-modern and robust enclosure, the **LO>>PROFILE** is elegantly styled and is inclined forwards for convenient operation.

■ Featuring a full size space bar with dedicated numeric and curser keypad the **LO>>PROFILE** increases the number of keys from 40 to 53. A combination of clearly labelled, sculptured and height-adjusted keys aids the advance to fault-free touch-typing.

■ Advanced Memory Systems have established an excellent reputation for product reliability and prompt delivery. This product has been tested to an impressive 20,000,000 depressions per key and AMS offer a full one year guarantee.

LO>>PROFILE

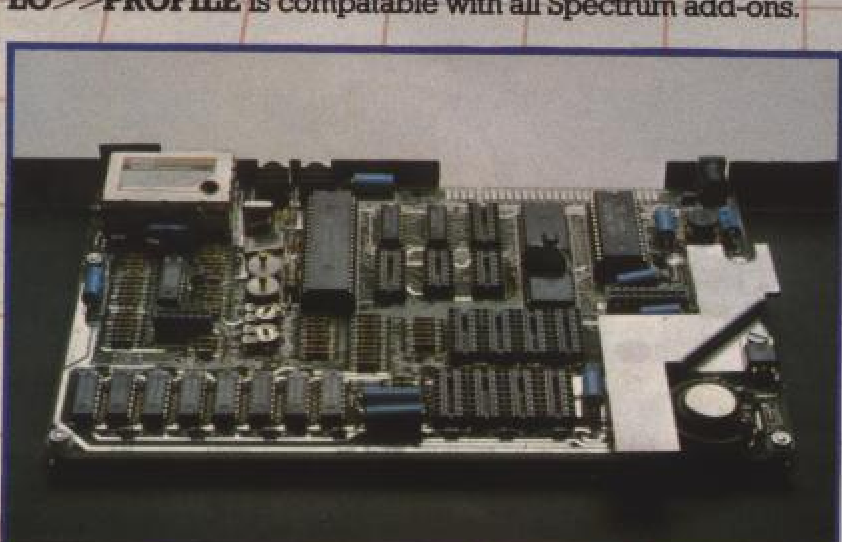


£49·95
plus £2.50 p&p (VAT inclusive)

THE LO>>PROFILE PROFESSIONAL FROM ADVANCED MEMORY SYSTEMS LIMITED.

Fitting your Spectrum computer board into the **LO>>PROFILE** keyboard is easy. All you need is a screwdriver to secure the board onto the base of the keyboard enclosure using the mountings provided. The **LO>>PROFILE** is compatable with all Spectrum add-ons.

If not available from one of our 200+ dealers then fill in the coupon and we will send you a **LO>>PROFILE** with our full no-quibble money-back guarantee. Or phone 0925 602690/62907 for instant Access or Visa orders.



Please send No_____ **Lo>>Profile Keyboard** at £49.95 plus £2.50 p&p (VAT inclusive)
I enclose a cheque/PO for £.................. or debit my credit card.
Card No
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ ☐ Barclaycard ☐ Access card
Signature __________ Date ________
Name __________
Address __________
__________ Postcode ________
To: Advanced Memory Systems Ltd., Woodside Technology Centre, Green Lane, Appleton, Warrington WA4 5NG

THE KEY TO PROFESSIONAL GAMES DESIGN
ON THE SPECTRUM 48K

THE GAMES LANGUAGE OF THE 80'S!

Now, without any knowledge of machine code, you can write fast, smooth, professional, totally original games and market them **without paying royalties.**

Even if you have already mastered machine code, we believe that the time and problems saved by writing in **White Lightning's** FORTH– based high level language could revolutionise commercial games writing for years to come.

IDEAL IDEAL is an Interrupt Driven Extendible Animation sub-Language. Once you have mastered IDEAL's easy to learn set of over 80 commands and just a little FORTH, you will be ready to produce arcade-quality games even if you don't know machine code. Up to 255 Sprites, each with its own user-defined dimensions can be moved around the screen (or memory), scrolled, spun, reflected enlarged or inverted with amazing speed and smoothness. Operations are possible between screen windows, Sprites and Sprite windows. Sprites can even stretch across several screens, so those difficult scrolling landscapes that form the basis of so many games are easy to achieve. Sinclair's own sound and graphics commands such as CIRCLE, DRAW and BEEP are fully supported, and there are some unique collision detection facilities.

MULTI-TASKING Because **White Lightning** uses interrupts, you can effectively run two programs at once. This means of course, that games like Space Invaders and Defender can be written without complex timing calculations. So while one program smoothly scrolls the landscape, the second animates the other characters. This is undoubtedly one of White Lightning's most powerful features.

MARKETING AND PORTABILITY Although **White Lightning** uses an integer FORTH as its host language, programs can be written in a combination of BASIC, FORTH, IDEAL and machine language.

What is more, programs written in FORTH/IDEAL will be highly portable between the Spectrum and implementations under development for other popular micros.

When it comes to marketing your completed games, there's no problem either. In fact Oasis themselves will offer to market outstanding software.

SPRITE DESIGN White Lightning, comes complete with a separate 20K program for developing the Sprites used in the main system. Not only can you use this to design your own Sprites from scratch, it also comes complete with 168 pre-defined characters covering games like **Asteroids, Pac-Man, Assault Course, Defender, Space Invaders, City Bomber, Lunar Lander, Frogger, Centipede, Donkey Kong** and many, many, more. These characters are ready to use or can be enhanced. And Sprites can be saved to tape between editing sessions before being finally loaded into the main program.

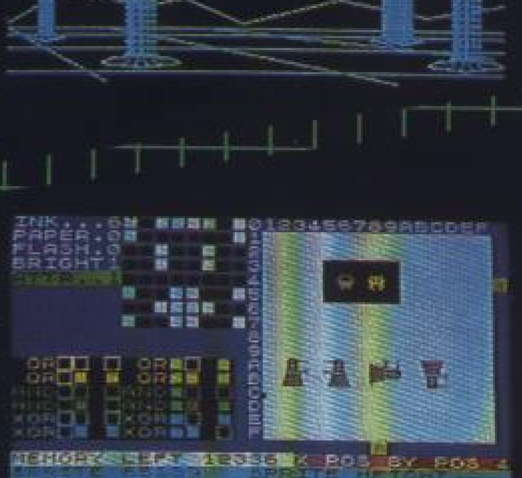
WHITE LIGHTNING

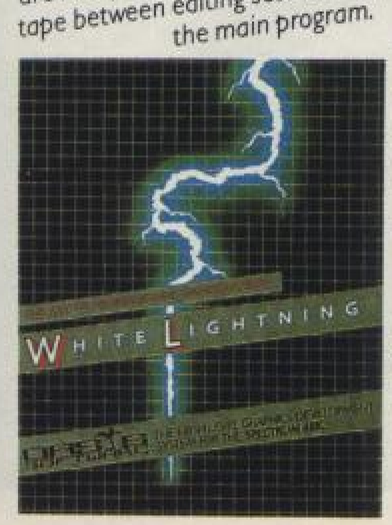




- Produces real machin[e] code programs which ru[n] independently of White Lightning.
- A multi-tasking animation language AN[D] a Sprite Development program together in one system-pack.
- Supplied with a FREE 16-minute demo, and a 130-page, easy-to-follow manual.







The High Level Graphics Development System for the SPECTRUM 48K . . . . .

OASIS SOFTWARE

AND COMING SOON! the power of White Lightning on the COMMODORE 64!

If your local dealer doesn't stock White Lightning, just send off this coupon for our rapid-despatch service.

Please send me ___ White Lightning System Packs at £14.95 each. I enclose my cheque/P.O. for £______

Name: ______

Address: ______

Oasis Software 9a Alexandra Parade, Weston-super-Mare, Avon, BS23 1QT Telephone: (0934) 419921. Every product carries a lifetime guarantee. All prices include extensive manual, VAT and p&p.

24 Hour Access Tele-ordering on (0934) 419921.

Crash back

Games this month:
ZZOOM
COOKIE
ALCHEMIST
ANDROID 2
WHEELIE
OMEGA RUN
SCUBA DIVE
FIGHTER PILOT
HARRIER ATTACK

ZZOOM
(Imagine)

Zzoom is one of the games that was B.C. (Before CRASH). It is exactly one year old now, and was the most wanted game of the August ZX Microfair last year.

Zzoom, being a fairly old game, has held its own in the market well, probably due to its good 3D graphics. They're pleasing and realistic, especially the way that the clouds move at different speeds depending on how close or far away they are from the player's view. Action is compelling and continuous, if not even tiring (it's hard work flying). The enemy aircraft 'zzoom' very realistically towards you. Overall, it's stood the test of time very well and can still be recommended as a great air to air/land and sea conflict.
MU

I remember Zzoom being reviewed well because of the graphics, which were some of the best looking 3D at the time. I particularly liked the screen layout and fresh use of colour. As it's a pretty fast game, the periodic 'breathers' between bouts of action are quite welcome. Has it stood up well? Yes, I think so, because it is very playable and yet hard enough to be interesting and a challenge. It's one of those games that's certainly worth dusting off and putting on the computer again. With Imagine going down the pan, some of their games may enjoy a curiosity revival.
LM

(*Matthew*) It never had CRASH ratings of course, but graphically its realism would still give it a fairly high rating from me, say 72%. When you're playing it you want to keep on, so its fairly addictive, but to want to come back to it another day – that might be a bit different. I think I'd give its addictive qualities about 69/70%.

(*Lloyd*) I've enjoyed playing it again and against current competition I think I'd give it 75% for addictivity, and about the same for graphics.



Zzoom

COOKIE
(Ultimate)

Cookie, along with *Tranz-Am*, was the second batch of releases from Ultimate. Of the two, perhaps *Tranz-Am* was the more popular, possibly because in some respects *Cookie* resembled *Psst*, and oddly *Psst* wasn't quite as popular as *Jetpac* had been.

This game was never really heavily pushed. Why? I don't know, because I think it's a great game and probably the most difficult to master out of the entire Ultimate range. The graphics are well up to today's

Cookie



standard and the game is very playable still, although some of its original addictive qualities are let down due to its dramatic increase in difficulty with each stage. Nevertheless, I would recommend this game highly. Good value and plenty of unique touches.
MU

I liked *Psst*, in fact it was one of my favourite games. *Cookie* I found much more difficult to master, and playing it again – nothing's changed! I think I would agree that it is probably one of the most, if not the most, difficult of Ultimate's games, and it has been grossly underrated. To judge it by today's games is no problem, it certainly equals anything available. The graphics are detailed, amusing and fast. The game content is very high, and I always admired the idea that objects first have to be 'stunned' so that when hit for a second time they can be directed in the direction you want. This makes 'zapping' into a quite complex art. Yes, I think *Cookie* would be a fine buy for anyone who hasn't already got it, and is wondering why all the recent releases have been boring. Sometimes, it pays to look over your shoulders!
LM

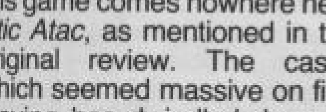
(*Matthew*) *Cookie* is a game that demands a lot of skill, timing and patience, so I'd give it 79% for playability today; it has a high level of addictivity if you've got the time and patience! About 72%. The graphics are great, very original and colourful. I'd give them 83%.

(*Lloyd*) I would go higher on playability, the game is great fun to play, and I agree with the other ratings. I think if *Cookie* were to come out now, this month, it would do very well on ratings overall.

ALCHEMIST
(Imagine)

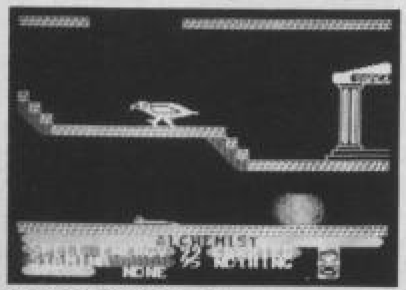
In issue 2 we said that *Alchemist* was Imagine's first step into the mist-shrouded world of terror and mystery. Perhaps overstating it somewhat! *Alchemist*, however, was Imagine's first attempt at anything with adventure overtones in an otherwise arcade style game.

Alchemist does have some *Imagin*ative graphics, although I can't agree with the review, 'exceptional graphics... excellent graphics'. They are quite old looking and don't move very easily about the screen. The keyboard layout is poor. Overall this game comes nowhere near *Atic Atac*, as mentioned in the original review. The castle which seemed massive on first playing has dwindled down to just a dozen separate rooms. I think it was overrated.
MU



Use of computer	80%
Graphics	85%
Playability	90%
Getting started	68%
Addictive qualities	89%
Value for money	95%
Overall	85%

I don't entirely agree about the graphics. They are quite original, certainly very detailed. If they move awkwardly it is more because of their size and the inertia which has been added. On the other hand I do think *Alchemist* lacks a lot in playability because of the content, which isn't very high. It's an easily completed game and unlike *Atic Atac* doesn't have sufficient arcade interest once completed to keep you having another go.
LM

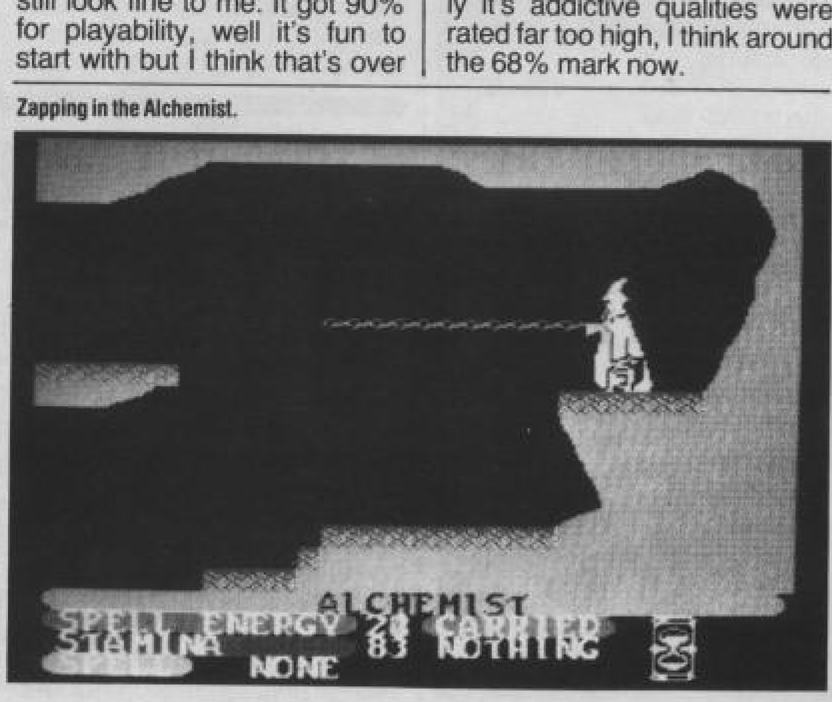


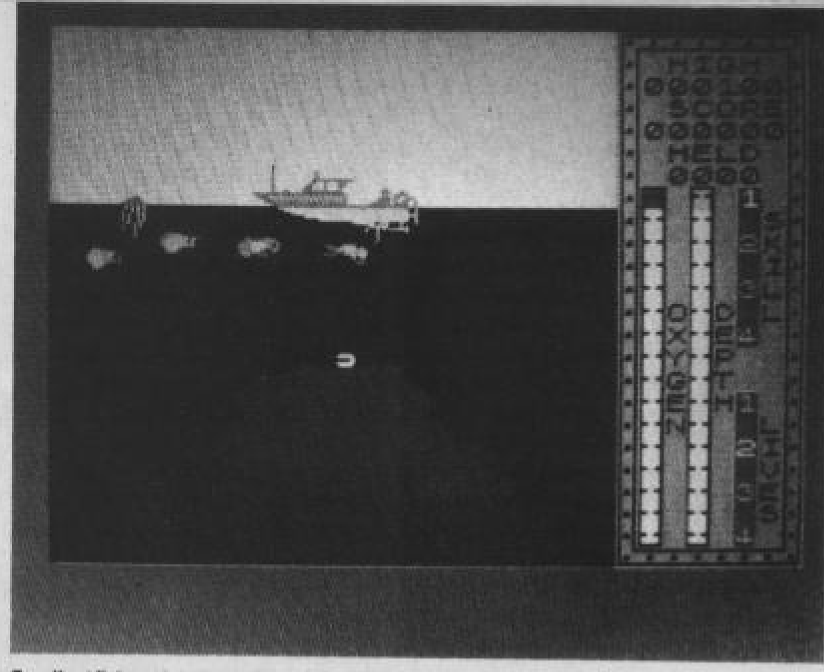
Flapping in the Alchemist.

(*Matthew*) The 80% for use of computer doesn't hold up as far as the keyboard play goes, and I wouldn't give it more than 69% now. The graphics too, by today's standard, would have to come down, probably around the 72% mark. As to its addictive qualities, well the original 89% is right out of the window! More like 60% for me.

(*Lloyd*) I wouldn't push the graphics down much at all, they still look fine to me. It got 90% for playability, well it's fun to start with but I think that's over the top. It seems to me, looking back on it, that *Alchemist* was among the first of a generation of games which tried to get definitely away from the shoot em up tradition, so perhaps its ratings were more appropriate then than they are now. Certainly it's addictive qualities were rated far too high, I think around the 68% mark now.

Zapping in the Alchemist.





Excellent fishy animation in Scuba Dive.

SCUBA DIVE
(Durrell)

Scuba Dive certainly got a rave review from CRASH in issue 2 (92% overall) and has remained a popular vote in the HOTLINE ever since. How does it fare now.



Use of computer	89%
Graphics	98%
Playability	90%
Getting started	89%
Addictive qualities	90%
Value for money	98%
Overall	92%

Soon after the arrival of *Scuba Dive* a few other companies followed suit and produced underwater games. *Scuba Dive* is still the best one though. I tend to agree with most of the review but the game does tend to get boring, tedious and unaddictive very soon – no lasting appeal for me. Sound and a few more danger scenes could have made this low content game better. However, I wouldn't tell anyone not to buy it, just that they might be a bit disappointed after a while. I must say, that the animation and drawing of the sea creatures is very well done.
MU

I think I agree with Matthew about the content of *Scuba Dive*, not that it's bad in itself, but that the implementation of the game makes for one that is fairly slow after a while. *Scuba Dive's* success lies more in the first few plays where the graphics delight and the size of the underwater caverns promises much fun. It isn't a game of skill in the sense of fast timing and firing accuracy, but swimming skills to take a time to master. Once that's achieved though, some of the fun does lag. On the whole I would say that if we were reviewing as new today, it would still get a very high rating from me, but less on the addictivity.
LM

(*Matthew*) I think 89% for use of computer was a little high because controlling your man isn't as positive as it could be, or as positive as many games since have shown can be the case. The fish etc, are very good, but the caves look a bit uninteresting and the diver is small and not as well done as the fish. I would say the graphics should be 74% now. I never found it great fun to play, just searching around for treasure, so I'd give its addictive qualities and playability about 70%.

(*Lloyd*) I wouldn't drop the graphics by anything like as much, perhaps around the 85% mark. I agree on addictivity but would keep the playability figure up more, say around 79%. I think it holds up pretty well.

Crash back

HARRIER ATTACK *(Durrell)*

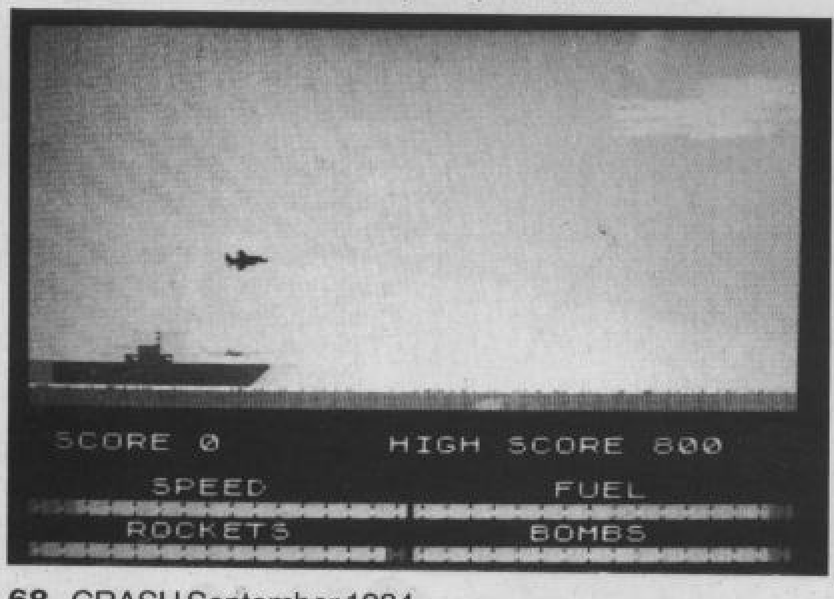
Durrell's *Harrier Attack* was a B.C. game. At the time of its release a number of magazine reviews commented on the tastelessness of a game which sends Harriers into strafe and bomb an island town in the wake of the Falklands Conflict. Well, that's as may be, but it seems a rather pointless criticism to level at a game which is firmly in the tradition of computer games – knock hell out of the enemy!

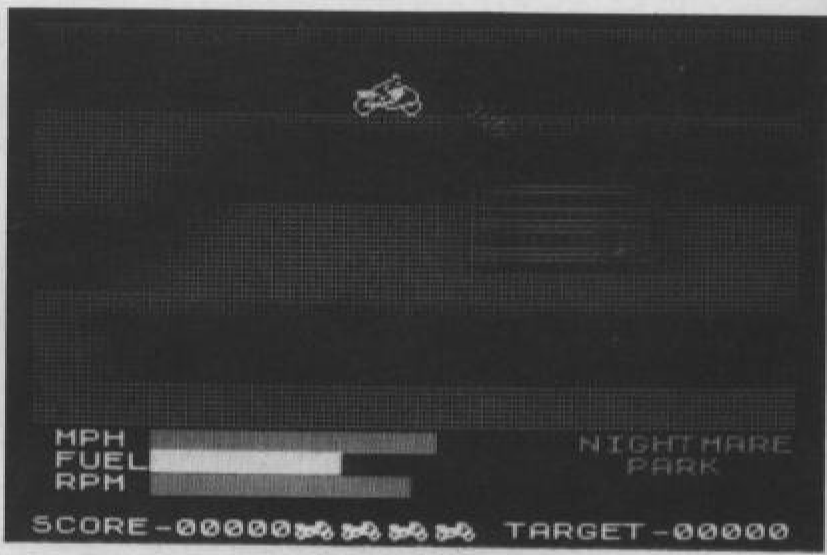
This game is fun to play. I have to say that this is the first time I've played it, so it really is like a new game review for me. I think the various skill levels play a major role in its addictive qualities. Graphically it is quite primitive by today's smooth standards, but by no means does this interfere with a great game. Colour has been used realistically and wisely. I can't really fault it at all as a simple shoot em up except that I wish Durrell would update some of the graphic features, such as increasing the size of the playing characters, and perhaps adding a bit more sound. Overall it has stood up very well.
MU

I remember first off being struck by the nice effect of the sun glinting on the waves of the sea and thinking that because of the more solid looking graphics it was more fun to play than say *Penetrator*, which it resembles. But after a few plays I realised that there is less fun here than in *Penetrator*, which isn't to say that *Harrier Attack* is boring, but I do think it lacks content. Having taken off, bombed, landed, there isn't much more to do except improve the old hi-score. The game still looks quite good by today's standards although the landscape scrolling is a bit jerky. In its day, *Harrier Attack* was one of the new generation of somewhat better looking shoot em ups, and that was its strength. Spectrum programming has overtaken its look now.
LM

(*Matthew*) Although the control keys are the cursors, you only really need up and down for the most part, and they are responsive, so I'd give use of computer 73%. Graphics, oh, about 70%, and playability 71% – it's quite good fun. Addictivity a little lower, high sixties I think.
(*Lloyd*) I wouldn't go quite so high today as I would have a year ago. Graphics, yes, not bad, around the 68-70% mark, playability about 68%, but its addictive qualities drop off rapidly. Once you've landed you don't want to bother again somehow, only 60% – medium addictive.

Taking off for another straffing run over enemy territory in Harrier Attack.

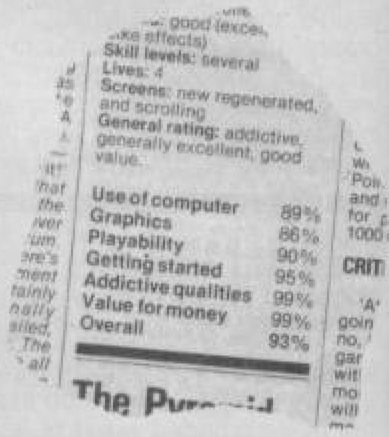




Zooming along in Wheelie.

WHEELIE *(Microsphere)*

Wheelie got the best overall percentage in CRASH issue 2 – 93%. In fact that makes it one of the highest scoring games in any issue of CRASH. Even now, it is fighting it out in the top five of the HOTLINE chart and has been successful in most popular sales charts as well. What do we think today?



...good (exce... ...ke effects)
Skill levels: several
Lives: 4
Screens: new regenerated, and scrolling
General rating: addictive, generally excellent, good value.

Use of computer	89%
Graphics	86%
Playability	90%
Getting started	95%
Addictive qualities	99%
Value for money	99%
Overall	93%

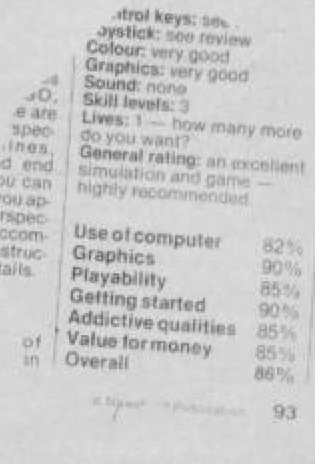
All I can say is that *Wheelie* is still the same compulsive, addictive game that it ever was. Nobody has tried yet to copy this game because it cannot be bettered. This game is so panicky, I just can't put it down. All the features are well structured to test the skill of the player and develop those skills in preparation for the final race against the biker. The graphics are so realistic, especially the crashes, but also the way in which the speed of the bike relates to hazards. They just haven't been improved upon by anyone yet.
MU

Wheelie was a highly original game when it came out, and looking at it now, one can only say that it is still original because no one has done anything like it. I rather doubt that any other version would be better anyway. I don't know yet what the Eddie Kidd game from Martech will be like, but if it's anything like *Wheelie* it will have to be really good to be better.
LM

(*Matthew*) I think the graphics are marvellous and I would want the rating to go up from 86% to 90%. I'm tempted to put up the playability (90%) a per-cent as well, as for addictive qualities (which were 99%) I'm only disappointed they weren't lower so I could put that up too!
(*Lloyd*) *Wheelie* seems like a good wine, put it down and when you open the bottle it tastes even better than when it was new. I agree with Matthew – a real curve of a game.

FIGHTER PILOT *(Digital Integration)*

Fighter Pilot was the first offering from Digital Integration, a software house which has established itself very firmly with this and its second game, *Night Gunner*. We gave *Fighter Pilot* an overall rating of 86%, and said that it was definitely the best simulation for the Spectrum yet. Is it still?



...trol keys: se...
...ystick: see review
Colour: very good
Graphics: very good
Sound: none
Skill levels: 3
Lives: 1 — how many more do you want?
General rating: an excellent simulation and game — highly recommended

Use of computer	82%
Graphics	90%
Playability	85%
Getting started	90%
Addictive qualities	85%
Value for money	85%
Overall	86%

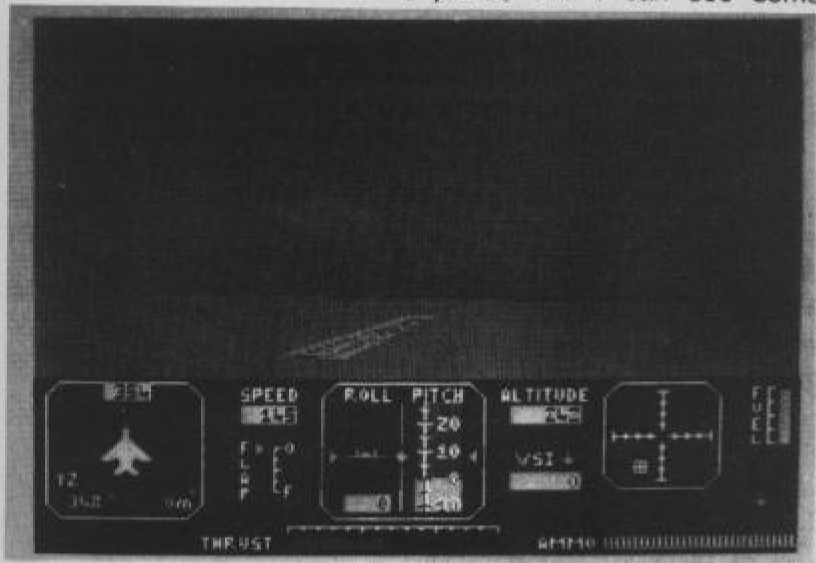
93

Yes it is! Undoubtedly the best flying simulation for the

Spectrum as far as I'm concerned, and it will remain at the top for a long time to come, I'm sure. Nothing I can see about the review needs commenting on – game and review stand up well to the test of time! After playing so many games and mastering them, this one still remains unmastered by me – perhaps if I played non-stop for two weeks I might be able to fly this high performance figher well. The ultimate simulation for the Spectrum.
MU

up with a similar program that actually creates a detailed ground effect, but until that does happen I think the original review's comments about being the best still stand.
LM

(*Matthew*) In general I wouldn't alter any of the original ratings. At 85% for playability, it rather depends on whether or not you are daunted by the prospect of learning to fly the plane, and I can see some

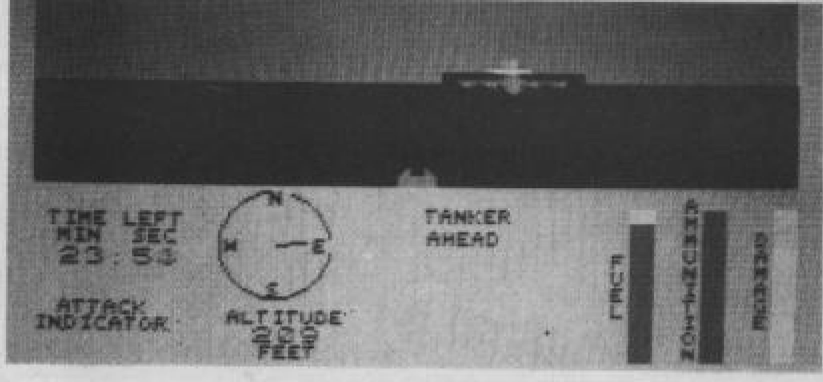


Runway to port in Fighter Pilot.

Attention to detail, especially in simulations, is bound to make a game playable, and *Fighter Pilot* hasn't really been bettered on that count. Everything works and combines to make this a very real experience of flying. There's the possibility that someone, maybe Digital Integration themselves, will come

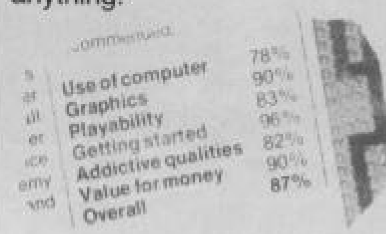
people (like me!) being put off – but the feeling of getting the hang of flying is great fun.

(*Lloyd*) No, I wouldn't argue with the ratings either. In fact, I might be tempted to put value for money up slightly (85%) because this program offers loads of possibilities for enjoyment if you like simulations.



OMEGA RUN *(C.R.L.)*

We said of Omega Run (issue 2, 87% overall) that it hovered between being a flight simulation and a straightforward game. Since then a number of flight simulations have appeared and *Omega Run* tends to look more like a game than a simulation, with, oddly, more similarity to *Zzoom* than anything.



Use of computer	78%
Graphics	90%
Playability	83%
Getting started	96%
Addictive qualities	82%
Value for money	90%
Overall	87%

The instructions are of a high standard, each item being very carefully explained. The idea behind it is still quite good although, looking back, it seems to lack a fair amount of content and variation, meaning its addictive qualities have dropped in comparison to later games. It's a shame the 3D effects couldn't have been improved, like a moving landscape. The graphics stand up as fairly detailed, but there aren't all that many of them. It's still playable when you get it out again, but doesn't have much of an addictive quality.
MU

I thought *Omega Run* was a lot of fun when I first played it, although not so addictive as to keep me trying. I saw the Commodore version not long ago, expecting a vast graphic improvment, but it looked very similar, no attribute problems of course. Getting the Spectrum version out for a re-run, I left it feeling somewhat unimpressed because it does lack content, there's too much twisting and turning to shoot enemy planes down, and little else.
LM

(*Matthew*) It got 90% for graphics – no way! There aren't many graphics, and there really isn't any proper attempt at 3D as in later games. No, that would have to go down to about 59% now. I'd also drop the playability rating (it got 83%) to about 63%. It's addictive qualities were overrated too, not 82% anyway, more like 60%.

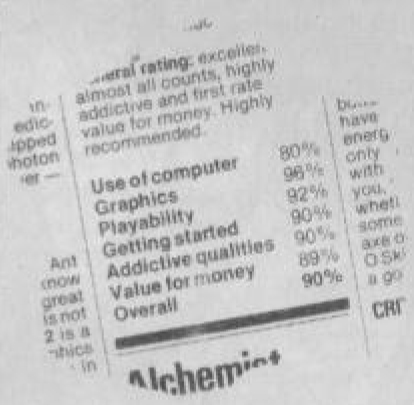
(*Lloyd*) Well I'd go along with most of that. I don't think *Omega Run* has exactly stood the test of time as well as other similar flying games.

ANDROID 2 *(Vortex)*

Android 2, a follow up (no surprise) to *Android 1*, was a CRASH SMASH in issue 2 getting 90% overall. How's it stood up?

The 3D effect on *Android 2* works very well and is still one of the leading 3D maze style games. It's attractive, colourful and boasts good animation. Playing it today, it's still difficult which in a sense makes it challenging. In the original review, one of the bits used was mine, I said that this was a good game in itself with great graphics like *Ant Attack*, but a better playing game than *Ant Attack*. I haven't changed my mind! The demo and instructions are some of the best seen.
MU

Considering the difficulty of getting through the very complex maze with all its hazards, this is still a very playable game



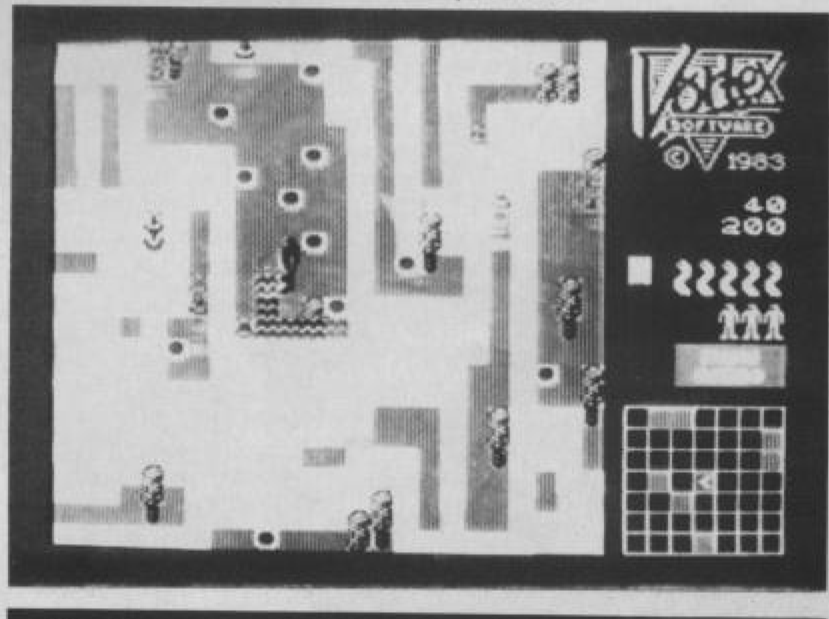
...eral rating: excellent almost all counts, highly addictive and first rate value for money. Highly recommended.

Use of computer	80%
Graphics	96%
Playability	92%
Getting started	90%
Addictive qualities	90%
Value for money	89%
Overall	90%

with plenty of challenge and a lively, full, colourful screen. I always liked the graphics and the 3D effect and no one has really challenged *Android 2*, in my opinion, if one is looking at maze type games. In truth, I don't think it has dated at all.
LM

(*Matthew*) I'd drop the graphics by 10% down to 86%, playability down 13% to 89% and addictive qualities down to 70%.

(*Lloyd*) I disagree! I wouldn't drop the graphics a bit, nor the playability because I think this is still enormous fun to play. However, it is hard to get through, which might lower its addictivity a mite, say down to 85% from the original 90%. For my money this is still a game which, if it came out today, one would buy and enjoy as entirely up-to-date.



Of the nine games looked at this month Lloyd and Matthew reckoned that Microsphere's *Wheelie* and Digital Integration's *Fighter Pilot* are the two that had stood the test of time best of all, neither of them looking the least bit dated, and are certainly still the most enjoyable to play again.



DEREK BREWSTER'S Adventure Trail

IMAGINE...

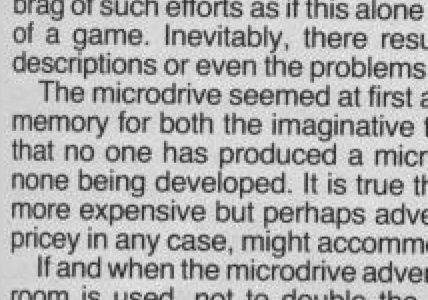
When it comes to adventures, memory is the limiting factor but, if you think that if extra memory should become available it should be used in creating even more locations to visit, then you clearly haven't played as many lifeless, unimaginative adventures as I have.

Graphics adventures have proven the more commercial yet too many are burdened by mediocre or downright useless pictures that add little to what would otherwise be another lacklustre text game. Graphics should not replace vivid, imaginative text.

Many text-only adventures concentrate on getting as many locations as possible into the 48K of the Spectrum and some even brag of such efforts as if this alone were any indication of the quality of a game. Inevitably, there results a loss in quality of location descriptions or even the problems themselves.

The microdrive seemed at first a good opportunity to provide the memory for both the imaginative text and good graphics. Strange that no one has produced a microdrive adventure and I know of none being developed. It is true that such an adventure would be more expensive but perhaps adventures, some of which are a bit pricey in any case, might accommodate the extra cost.

If and when the microdrive adventure does arrive I hope the extra room is used, not to double the length of the adventure, but to improve the vocabulary, descriptions, graphics and friendliness. Now let's think, you might combine the graphic quality of *The Hulk* with the rich text of Level 9 – some adventure!



ADVENTURE TRAIL REVIEW RATINGS

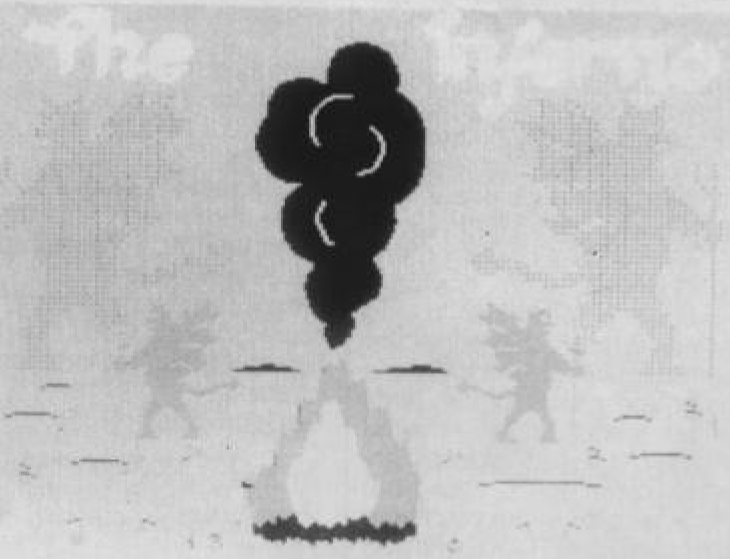
ATMOSPHERE: reflects quality of location description and graphics and how credibly characters behave.

VOCABULARY: the completeness of the vocabulary and friendliness of response. All words and associated words (objects etc) in location descriptions should be included.

LOGIC: reflects the logic of the problems encountered and whether or not you are likely to be killed without warning or chance of escape.

DEBUGGING: indicates the level of crashproofing. A program should not be crashed simply by making an incorrect entry or by pressing an unfortunate combination of keys.

OVERALL: general rating based on price and the other ratings BUT NOT AN AVERAGE OF THE OTHER RATINGS.



THE INFERNO

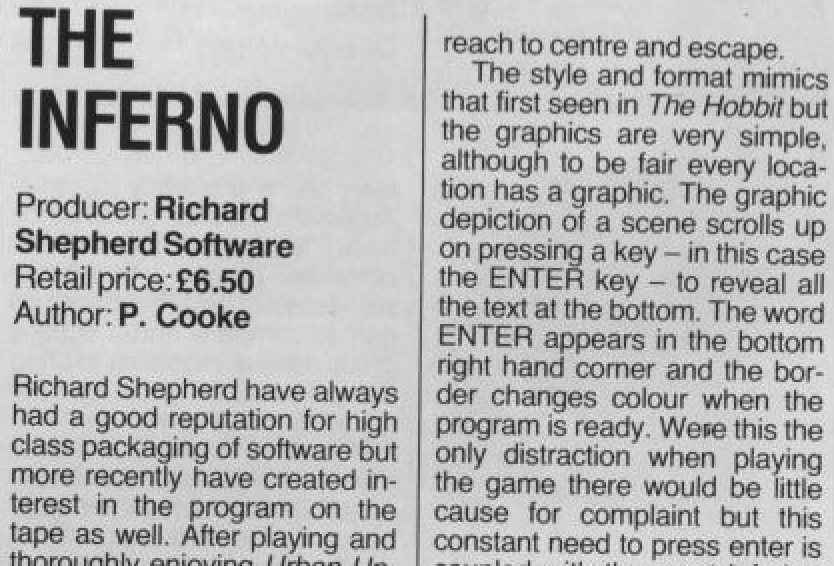
Producer: **Richard Shepherd Software**
Retail price: **£6.50**
Author: **P. Cooke**

Richard Shepherd have always had a good reputation for high class packaging of software but more recently have created interest in the program on the tape as well. After playing and thoroughly enjoying *Urban Upstart* I eagerly loaded up *The Inferno*.

The program closely follows the plan of Dante's Inferno which depicts the thirteenth centure concept of Hell. In you quest there are nine circles through which you must pass to reach to centre and escape.

The style and format mimics that first seen in *The Hobbit* but the graphics are very simple, although to be fair every location has a graphic. The graphic depiction of a scene scrolls up on pressing a key – in this case the ENTER key – to reveal all the text at the bottom. The word ENTER appears in the bottom right hand corner and the border changes colour when the program is ready. Were this the only distraction when playing the game there would be little cause for complaint but this constant need to press enter is coupled with the most infuriating input routine ever devised.

Every so often a key depression repeats a letter and if you are not meticulous you can spend a lot of time deleting back to correct these mistakes. As it turns out this game is quite enjoyable and long delays are



rare as it has a fast response time but an awful input routine is a major setback for any adventure to overcome.

Sometimes the action becomes too fast to read without the foresight to switch off the graphics, for example, when getting Cerbus to limp aside to let you down to the next level.

After only a few scenes you become aware of the independent characters featured in the game though they wander backwards and forwards like zombies. Virgil, like Thorin in *The Hobbit*, has a limited patois and generally comes out with such gems as THIS IS A DANGEROUS PLACE or WE MUST HURRY.

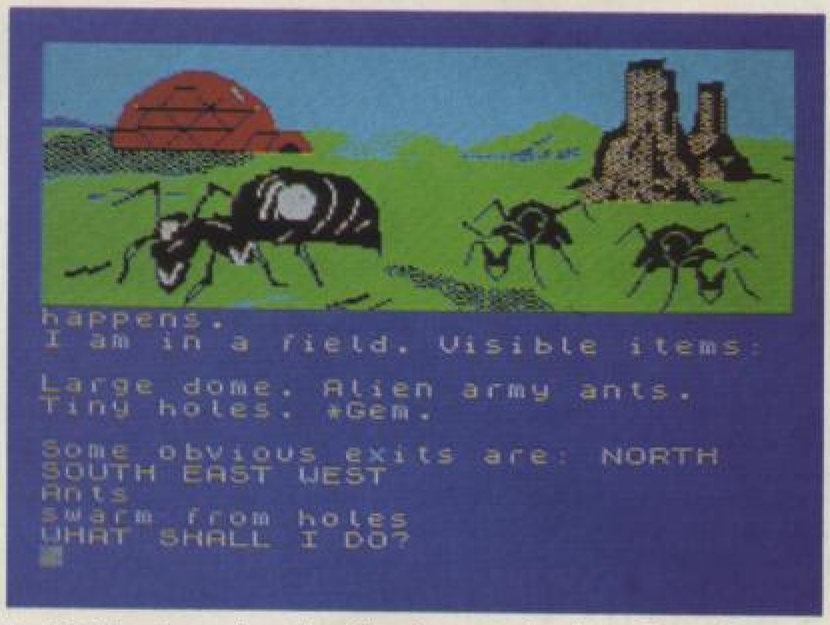
To tell a character to do something you must begin the command with the character's name; you can also ask Virgil for his inventory by entering VIRGIL LIST. Vocabulary moves quite some way from simple verb/noun but you might be surprised at TAKE with no GET option. However T is a very useful abbreviation for TAKE.

The Inferno is an adventure let down by an infuriating input routing. On the plus side the game features graphics at every location, an interesting and enjoyable storyline and the puzzles, lightened with a useful HELP command are not too difficult.

COMMENTS

Difficulty: Easy-average
Graphics: In all locations. Scroll off. Can be turned off. Average
Presentation: Black text on white. Average
Input facility: Poor. Accepts full sentences
Response: Normally fast, some graphics a little slow
Special features: Independent characters
General rating: Good.

Atmosphere	7
Vocabulary	8
Logic	8
Debugging	10
Overall value	**8**



A Crash Smash

THE HULK

Producer: **Adventure International**
Retail price: **£9.95**
Author: **S Adams, M. Gruenwald, J. Romita**

Ever since the early days of Automata adverts, comic strips have been associated with computer games and now a well-established adventure games company and a comics group have got together to bring the green mass of the Hulk to the adventure scene.

The Hulk is the first instalment of the Questprobe Series of games from Adventure International which will feature Marvel Comic characters including Spiderman and other Superheroes. Marvel Comics are publishing a comic called Questprobe featuring the Hulk.

You are Robert Bruce Banner, an ex-physicist irradiated by highly charged radioactive particles during the test detonation of a nuclear weapon. The radiation has a mutigenetic effect on Banner's cellular structure causing him to transfer into the green-skinned monster known to all as the Hulk. Although the Hulk is clearly superhuman – he can leap to a height of 3,200 feet and withstand a temperature of 3000°F – it is possible to injure him. We are told he could not survive a near-hit with a nuclear warhead. Yes folks, even superheroes have no answer to these awesome weapons.

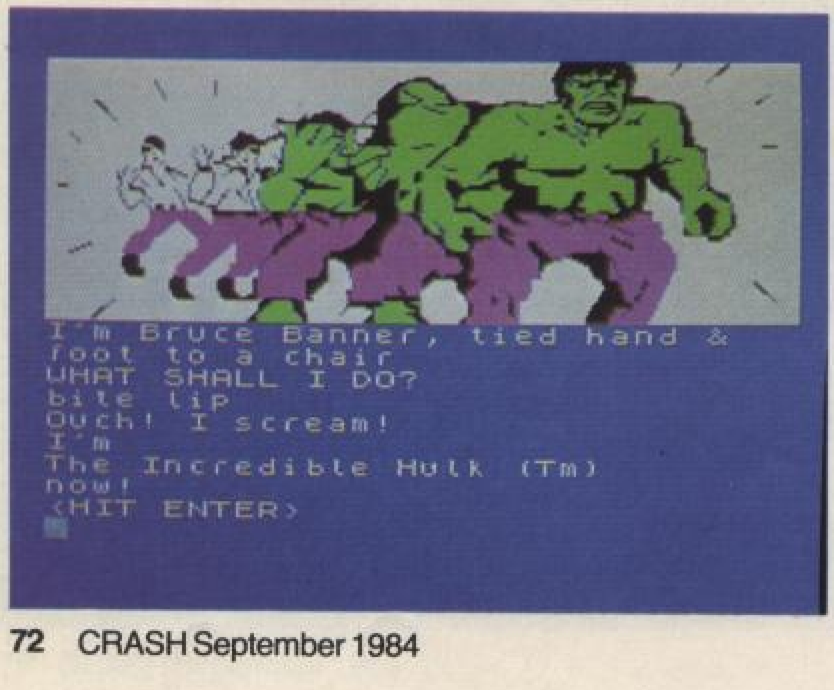
You begin as Banner tied up hand and foot to a chair and if you think you must flip to your alter ego to escape then I'd say you're doing quite well for an adventure which comes in a box marked 'Difficulty level: Moderate'. When in a room a gas soon permeates your skin turning it back to a Californian brown tan whilst flexing within are more gently rippling muscles.

What immediately strikes you is the richness and quality of the cartoon like graphics which depict your inflation to the green mass of the Hulk and subsequent demise to Bruce Banner. The detail is stunning. The graphics are not only tremendous but very fast, as is the response time and so the adventure flows along smoothly. There's no beep on input but the routine is so fast and efficient that mistakes are rare.

Your task is to locate all the gems and find somewhere to store them. There are many interesting problems to tackle but the foremost is how to survive. But when death-defying attempts come to an end not all is lost. In true cartoon style the hero is never really killed and pressing D for down will bring you out of the clouds and back on terra firma.

Other cartoon characters in this adventure are the Ant-Man who when reduced to the size of an ant retains his original mass loading a super punch for a half-inch high figure, and Doctor Strange who can tap the universe's ambient magical energy.

Vocabulary involves simple verb/noun couplings e.g., if you input WAVE FAN the reply AT WHAT? comes up and the program kindly gives you an





example of the type of input is now requires – e.g. AT TREE.

When in need of assistance you may type HELP and more often than not be greeted with SORRY I CAN'T DO THAT BUT ASK FOR A SCOTT ADAMS HINT BOOK AT YOUR FAVORITE STORE!

My only criticism of this fine adventure is the repetitiveness that sets in once you've established the object of the game. As you move around collecting gems each of the three domes becomes indistinguishable as each is represented by the same graphic. To leave each dome the same routine is painstakingly followed.

The Hulk is a truly marvellous adventure with super graphics and a theme familiar to everyone.

COMMENTS

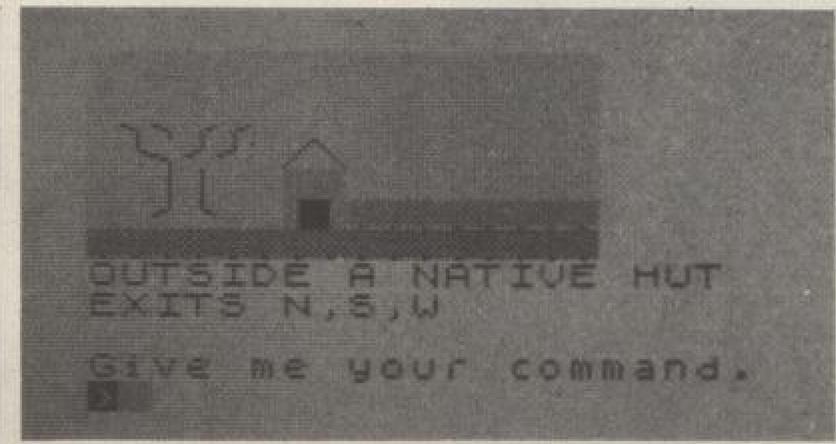
Difficulty: Average
Graphics: All locations and some actions. Remain on screen. Excellent
Presentation: Good
Input facility: Average. Two word inputs
Response: Very fast
General rating: Good.

Atmosphere	8
Vocabulary	7
Logic	8
Debugging	10
Overall value	**8**

ATLANTIS

Producer: **M & J Software**
Retail price: **£**
Author: **M & J Gamble**

You play James Parker who, after a 30-year search, discovers a map showing the location of the fabled island of Atlantis. You lead an expedition to the island but the long journey has soured relations among the crew and in the fight that ensues you are knocked unconscious. You awake alone but decide to carry on with your quest to find the lost city and, eventually, your way off the island. You immediate worry is to find enough food and water to sustain you on your journey.



The game has 150 locations, 30 of which carry a small graphic representation of the scene. 90 objects are strewn liberally throughout and the game features a vocabulary of some 200 yards.

On loading you are presented with a choice of three levels – easy, moderate and hard. The easy level allows the player 40 commands before he is overcome with hunger, and the hard level 20. Although at first your overriding concern is to survive, collecting treasure along the way will add to your score. With an open mind and nimble fingers I set off.

After what must be 40 commands (chose the easy level of course) my belly starts to rumble and I'm told to get something to eat. Since I find myself beside a gurgling stream I decide to drink some water. On filling my flask and drinking I'm led to believe all is well again but I met with the curious report THAT'S A NICE HAT YOU ARE WEARING. Either this is a bug or someone's got a peculiar sense of humour. It's true I did pick up a hat earlier and who knows, it may well be a nice one. Being a shrewd explorer I decide to refill my flask and perhaps take another drink as well but, alas, food and drink cannot be accumulated in this way and I must wait until my next 40 commands are running out. Once nourished I settled down to a jolly jaunt through sand dunes and forests, collecting treasure and many items for which I just couldn't find a use.

Some of the situations you meet are a little incredible. You find the master key inside a cocunut of all places, and how on earth do you get into a forest by digging through the bottom of a pit?

To my knowledge this is the first Quilled adventure with graphics. A competent game, *Atlantis* provides many difficult and sometimes peculiar problems which will take weeks to solve.





COMMENTS

Difficulty: Quite difficult
Graphics: Some, primitive
Presentation: Average
Input facility: Verb/noun
Response: Very fast
General rating: Fair, food element can become a distraction.

Atmosphere	6
Vocabulary	6
Logic	5
Debugging	7
Overall value	**6**

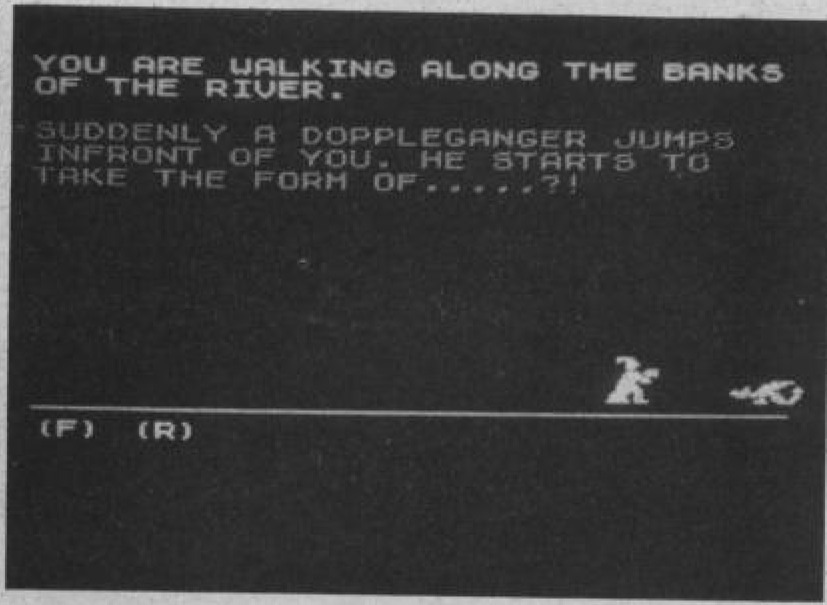


WARRIORS REVENGE

Producer: **Video Force**
Retail price: **£**
Author: **Anon**

Warriors Revenge is the first part of a Trilogy of continuous adventures. After you have mastered *The Land of No Return*, *The Castle of Death* awaits you but cannot be played without completing this adventure.

The instructions on the cassette inlay are almost obscure in places but charmingly precise when in the loading instructions it says 'Type LOAD... ENTER... PLAY on cassette recorder and *Warriors Revenge* will load automatically.' Amazing what these computers can do.



You are asked by Yeta, Wizard of Sebra, to return three golden keys lost in the land of No Return. A semi-role playing combat system allows you to fight monsters and hopefully you survive long enough to return the keys and collect a reward. Your skill, determined by pressing S as numbers ranging from 1 to 6 are randomly flashed onto the screen, and stamina, equivalent to hit points and similarly determined by pressing A, are added to values achieved during the fight sequences.

Warriors Revenge is basically a multiple choice adventure. At each location you decide between options like R (Run), L (Leave), D (Drink), F (Fight), as well as the usual N, S, E, W. Which of these confront you varies with the location, but of course, you always have a choice. However, just as with some of the quiz shows on TV that feature exotic prizes, you may be forgiven for thinking that when a crucial answer is needed it relates to a trick question. For example, take the time I came across a cavern which sounded to me suspiciously like a crevasse. You are told you can probably jump the crevasse and so you have no need of Spock Logic to rule out R (Run) from the other two options – Jump and Vine. Yet jump gives you the report that you nearly reach the other side but fall while Vine has you falling into the cavern since the vine breaks. Run, incredibly, saves your life as you use the rope and tie it to the tree and swing across. So the moral here is that you must pick the least probably option to survive.

For 'A Game of Skill and Determination' this program has much dependency upon luck. Leaving aside the aforementioned appropriation of skill and stamina points the adventurer has locations where your progress is determined by pure luck. Take the place where you meet a man sitting by a tree stump. To pass you must engage him in an arm wrestling match but let me save you the doubts cast upon your manhood; when you are confronted by the choice between the numbers 1 to 9, choose 4. I had to break into the program to get around this bit of nonsense.

If you've caught the tone of this review you might guess at what's coming next. When I broke into the program a load of twaddle tumbled out onto my screen. The programming is, to borrow what's now becoming a worn euphemism, inefficient. Furthermore, though I am not the world's greatest for spelling, it's not difficult for me to spot that this program has some howlers. It gives you the impression no one else could be bothered to play the game.

The game is not mappable. N Takes you into the forest and S further into the forest. There is no Save routine – perhaps not essential considering the length of the game but it is certainly very easy to get yourself killed. At one point you must guess the name of a potion. If you don't guess correctly (?!!) then you are killed and must start again.

Perhaps this game would suit the younger end of the market, I think to myself, but what is this? Is this the game's attempt to splash its name across the pages of a notorious, salacious Fleet Street journal – a warrior is being raped! Run round to the video hire ship will you and hand in my video recorder – I'm going back to organic farming... Moo... Baa... Bah., Bah!!

COMMENTS

Difficulty: Average
Graphics: A few, very small
Presentation: Yellow on black. Good
Input facility: Very limited choice
Response: Fast
General rating: Poor

Atmosphere	**4**
Vocabulary	**1**
Logic	**2**
Debugging	**4**
Overall value	**3**

SPOOF

Producer: **Runesoft**
Retail price: **£7.50**
Author: **D.V. Stevenson, J.A. Slack**

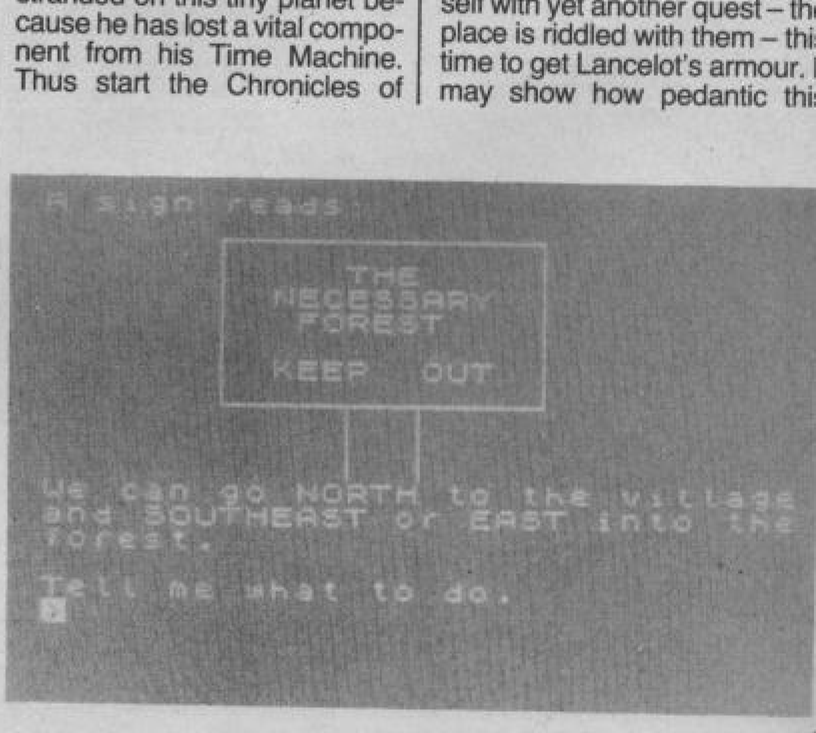
With a name like *Spoof* you might guess this piece of software represents a lampoon on the software scene. On playing, it reveals a sometimes biting satire on the fantasy world in general and the text adventure in particular. Unfortunately, much of the humour will be lost on all but the most experienced, and literally die-hard, adventures as this adventure proved most difficult without some guidance. As in most comedies there is a fall guy. You help Yaw Ning (The Tired One) to find Spoof the Magic Dragon, despite the whole world being set against him.

You begin in the village square and enter the store to collect your adventure kit and sword to find that the shopkeeper is really a doctor. Who can this doctor be? We learn he is stranded on this tiny planet because he has lost a vital component from his Time Machine. Thus start the Chronicles of Yaw, Part 5387, with the first quest of many to find and return the part.

Moving south past a Keep Out sign you find a green slimy frog sitting amongst the folds of a beautiful dress. Once you've kissed the frog you have nine moves to get back to Grimy Gerty's which lies nine moves somewhere to the north. This may now seem straightforward but what might you have done had you not read what you must do in this column? Luckily my hair is firmly attached to my scalp and I managed to contact Runesoft.

A little further on you find some wart remover but don't drink it – it's one of the items needed to fulfil the quest from the three headed vulture; others are the dress of a princess, a magic rope and the ring from a pig's nose. This last is wonderfully and amusingly set up since no sooner do you learn of your need for a pig's ring than you see a conspicuous sign pointing to a pig's cave. These ever-so-easy occasions comically contrast with the utter lack of mercy shown should you make a wrong move with any of the puzzles. To this extent not only is the vocabulary unfriendly but so is the program as a whole. One slip or inappropriate input and you're dead! And it is no use matching satire with silliness. On requesting HELP I was told to panic. I input PANIC to meet IN A BLIND PANIC I THRASH ABOUT, LOPPING MY HEAD OFF WITH A SWORD AS I DO SO with the inevitable result I AM DEAD. Once very cute point is you can panic to your heart's content – but only before you find the sword.

At the Bogg Inn you find yourself with yet another quest – the place is riddled with them – this time to get Lancelot's armour. It may show how pedantic this





adventure can be to say that you can only enter the inn once (so wandering around aimlessly is not a good idea) and you TALK to the locals in the bar but don't SAY anything, this last being the more usual entry for communication.

One of the few places you can examine anything is within the fairy ring and the only thing you can examine here is the goblet whereupon you drop it. If you stick the pieces back together again you have, in the vernacular of another source of satire, something completely different. This may be the time to mention that you'll need the Holy Grail before you can embark on the barge.

Humour necessarily pervades each and every place name with the Obligatory Mountains, Lake Necessary and Necessary Forest. In the Lake Necessary monster's lair you are told THERE'S A FUZZY PHOTOGRAPH OF WHAT MAY, OR MAY NOT BE, A HUMAN BEING ON THE WALL. The monster busies himself eating half a cat and your left arm and if you try to swim away the monster kills and devours you. The last thing you see are half a cat, a bit of owl and your left arm swilling around the contents of the monster's stomach.

Spoof is a Quilled adventure and therefore has an almost instantaneous response time. As a satirical piece it is often amusing and would suit a jaded and very experienced adventurer.

COMMENTS

Difficulty: Very difficult
Graphics: Occasional, things like signs
Presentation: White text on blue. Good
Input facility: Verb/noun
Response: Very fast
General rating: Good.

Atmosphere	**6**
Vocabulary	**6**
Logic	**5**
Debugging	**7**
Overall value	**6**



Firstly, I must correct a slight error in the solution to finding **Ofnir** which was printed in the July issue. You must go to the Black Castle in Midgard and go north into Kranks Hall, not Rankles Hall as printed. I do hope this didn't cause too much trouble.

This month I've received several letters on the subject of improvements to the reviewing system. They are summed up best by **Graham Fulcher** of Thetford, Norfolk who writes: "What does the mark for difficulty indicate? Does 10 mean a game is very, very difficult or that it has the perfect level of difficulty? If the former is true then it is really advisable for a game to be near impossible so as to gain an excellent mark. Rather than a mark would it not be better to make a comment on the difficulty of the game.

"Indeed I believe there should be a series of short comments to complement the marks, just as in the main body of CRASH as these provide an excellent reference."

Initially I hadn't wanted to repeat information from the main part of the review. However, I now agree that comments would be a good idea and so, as can be seen, I have taken up Graham's suggestions. Graham wins this month's £12 of software for his letter.

Duncan Brown of Rotherham asks: "Could you please tell me if *Colossal Adventure* (Level 9) and *Classic Adventure* (Melbourne House) are the same? And if so, why the difference in price?"

Both games are, in fact, versions of the mainframe adventure *Colossal Cave*. The Melbourne House game is, I believe, the old Abersoft *Adventure 1*. If this is true there are a few minor changes, eg. a different way of passing the snake. The Level 9 game has 70 extra rooms which were not in the original game and hence will not be in the Melbourne House version. Both versions are very good value for money. The Level 9 game is slightly better but £3 more expensive.

Scott Moore of Framwellgate Moor, Durham asks: "Which Level 9 game would you recommend as the best buy?"

You really can't go wrong with any Level 9 game as they are all brilliant. I'd go as far as to say that Level 9 have produced the five best Spectrum adventures although many *Hobbit* fans may disagree. I would consider the later relseases, *Lords of Time* and *Snowball* to be the best though *Colossal Adventure* is a personal favourite of mine.

I have reveived many letters asking how to pass the forcefield in *Planet of Death*. After trying dancing, shooting it, reflecting it and using many combinations of items I must concede defeat for this month. I'd be most grateful for some help!

And now for some tips. The coding system used is the same as last month. To find the solution simply rotate each letter one place backwards through the alphabet. C becomes B, B becomes A, etc.

FANTASIA DIAMOND
Gerard Doyle, Ireland
How do you get through the window?
SVC HMBTT

COLDITZ
Scott Moore, Framwellgate Moor, Durham
How do you open the coffin?
HFU UIF DSPXCBS BOE VIFO MFWFS MSE

SNOWBALL
John Denton, Willoughby
How do you repair the robot?
FYBNJOF UIF SPCPU HSWF JU UIF PCHFDU SFRVJSFE

PLANET OF DEATH
Conor O'Neil, Ireland
How do you get the mirror from the man without breaking the mirror?
HFU GMPWFT,XFBS GMPWFT,HFU NBO,HFU NJSSPS,ESPQ NBO

QUEST FOR THE HOLY GRAIL
A. Telford, Highworth
How do you pass the knight that says NIC?
HJWF TISVCCFSZ

PLANET OF DEATH
Christopher Mitchell, Cramlington
How do you get the rope?
VTF GMJOU

SHIP OF DOOM
Christopher Mitchell
How do you get the key from under the glass?
QPJOU TPOJD TDSFXESJWFS

ESPIONAGE ISLAND
Paul Walts, Ilfracombe
How do you get out of the dark bundle (parachute)?
SFNPWF QBSBDIVUF

CLASSIC ADVENTURE
Michael Manley, Chesterfield
How do you pass the snake?
QMBZ GMVUF
Craig Rilchie, Liverpool
How do you make friends with the bear?
USZ GFFEJOH JU



TOP SECRET

THE PIRACY DOSSIER

The GUILD OF SOFTWARE HOUSES claim that over £100m a year is being lost through the illegal copying of games. As our agents in the field, you are asked to undertake a mission to help discover the truth in this statement. Should you accept the mission you will be helping the free world maintain the ascendancy of capitalism and free market trading. Your identity, naturally, must remain top secret...

TOP SECRET

SOFTWARE PIRACY has become one of the biggest debates of the year, with enormous figures being tossed around suggesting profit losses running into the tens of millions of pounds a year. CRASH readers have sometimes fought back, saying that the software houses are at fault because of high prices. In turn, the software business has fought back itself with all sorts of devices to combat copying - one company is even using 'holograms' on its covers which are produced under the sort of security normally used for credit card production.

BUT WHAT DO YOU REALLY THINK ABOUT SOFTWARE PIRACY?

This page is a short questionnaire on the subject of software piracy, both the commercial variety and home copying. We want your views on the matter as honestly as you feel you can give them. It is not the sort of questionnaire where we can offer prize draw incentives to encourage you to fill it in, as we respect the fact that most of you might not want your names and addresses penned at the bottom of the form! However, it is an important piece of research and we should be grateful if as many readers as possible would complete the form and return it to us. Delete inapplicable answers where necessary, and thank you for co-operating!

1. Do you think 'home' copying is harmful to the software business?

   YES / NO / DON'T KNOW

2. Is there a difference between home copying and commercial piracy?

   YES / NO / DON'T KNOW

3. If 'yes' to the above, do you think commercial piracy is more or less harmful than home copying?

   MORE / LESS / ABOUT THE SAME

4. Do you make copies because...

   A) originals are beyond your resources?
   B) you resent paying the full price?
   C) you just enjoy making copies?
   (tick the appropriate letter)

5. Do you actually make illegal copies?

   A LOT / OCCASIONALLY / NEVER

6. How many originals do you own and how many illegal copies?

   I have.....originals/ .....copies

7. Do you produce copies...

   A) strictly for your own use?
   B) to give to friends?
   C) to sell to others?
   (tick appropriate letter)

8. If you make copies, how many would you usually make from one original?

   I would make ...... copies

8. How do you produce your copies...

   A) tape to tape?
   B) using a tape copier?
   C) breaking into program and resaving it?
   (tick appropriate letter)

9. What is the total value of your collection (including copies)?

   The value is £.........

10. And what portion of the value is in illegal copies?

    The illegal value is £........

11. Where do you get your copies from?

    A) home
    B) school
    C) computer club
    D) friend's house

12. Would you still copy games if they were much cheaper?

Cut this page from the magazine (or send a photocopy if you prefer) and send it back to us: CRASH QUESTIONNAIRE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB


ULTIMATE
PLAY THE GAME
PRESENTS
JETMAN
SORRY, SIR, BUT IT LOOKS AS THOUGH WE'VE FOUND HIM!
DRAT!
SAVED! ME SAVED!
SAVED FROM THIS PLANET OF PRECIOUS GEMS!
NOW I CAN CONTINUE MY SEARCH FOR THE EYE OF OKTUP!
WELL, PEANUT-BRAIN! YOU BLEW IT AGAIN! YOU LOST YOUR SHIP AND FAILED TO FIND THE EYE OF OKTUP! ALSO YOU GAVE ME PLENTY HEAD-THROB! FOR HAVING TO COME LOOK FOR YOU!
HAH!
I DON CARE!
WITH ALL MY JEWELS I CAN BUY ANOTHER SHIP!
I CAN BUY WHATEVER I WANT AN' BE FAMOUS!
I MIGHT EVEN BUY YOUR ROTTEN JOB!
S'THERE! SIR!
PHT-PHT-PHT-
BEEP BEEP BEEP
WARNING
THIS SHIP IS TOO HEAVY TO REACH EARTH! IT IS TOO HEAVY BY 3 KIL
I AM SCARED
DUMP SOMET
BOSS
THIS IS A CRISIS! THERE IS BUT ONE COURSE OF ACTION THAT WILL SAVE THE SHIP...
HO NO YOU DON'T!
I KNOW YOUR GAME! YOU WANT TO DUMP MY LOVELY JEWELS TO LIGHTEN THE SHIP!
WELL I WON'T LET YOU DUMP MY LOVELY JEWELS! Y'HEAR?!
MY JEWELS STAY ON BOARD!
STREWTH!
HORA!
WE'RE RICH! WE'RE RICH!
WE'RE AWFULLY RICH!
TRA-LA
I STILL HAVE TWO MASSIVE DIAMONDS THAT I HID IN MY SOCKS! ENOUGH TO BUY A NEW SHIP AN' CONTINUE MY QUEST!
HAH!
'WONDER WHAT TIME THE SHOPS OPEN AROUND HERE!
IT MUST BE HALF-DAY CLOSING...
ARGH!
MOONQUAKE!
RUMBLE
POO-QUAT!
GOOD GRIEF! A BABY QUARK!!
KRAK
MUMMY!
WOW! GOOD JAB I'M NOT SCORED! GOOD JIB I'M NUT SCROOD! GAD JIB I'M NIT SCREED! GED JUBE MIME SCOT NEERED! WOW...
BLEAT
ME FWIGHTENED!
ME SCARED!
ME HUNGRY!
ME DIAMONDS!
ME LIKE!
CHOMF CHOMF
SNATCH
SAY YOUR PRAYERS, QUARK!
HUMM! ME WANT MORE CRUNCHY FINGS LIKE MUMMY JUS' GAVE ME! ME SMELL MORE OVER THERE!
SNIFF SNIFF
ME GO LOOK!
HI, BOSS!
CHOKE!
GOODIES!
CHOKE!
BOSS
PEA-BRAIN!
POO-QUAT!
EARTH

The CRASH HOTLINE

Hallelujah! We have a new number one! Not that we want to put down *Jet Set Willy*, whose long stay at the top slot is testament to its popularity, but it does make a refreshing change. Otherwise, the outstanding alteration is the 42 place leap upwards for **Beyond's** *Lords of Midnight* to the number 6 position. Several newcomers this month, starting with *TLL* from **Vortex**, in at number 18, and immediately behind it **Micromega's** 3D spectacular *Full Throttle*. A bit further down we have *Match Point*, the new tennis simulation from **Psion**, in at 27; and another **Sinclair** game, *Stop The Express* at 31 **Bug-Byte's** *Antics* makes an appearance for the first time, in at 40, with **Adventure International's** *The Hulk* in at 46, followed by **Artic's** *World Cup Football* at 49. **Crystal's** (renamed **Design Design**) *Hall of the Things* reappears along with *Test Match* from **C.R.L.**, and *Splat* from **Incentive**.

Big movers this month , apart from those mentioned already, include **Ocean's** *Moon Alert*, up 20 places, *Psytron* up 11 places, *Mugsy* up 15 slots, and *Kosmic Kanga* which climbs 21 places to this month's 28 slot. **Gilsoft's** adventure utility *The Quill* is still proving popular.

SEPTEMBER HOTLINE STATISTICS

This month proved to be a bumper one for the Hotline, with over 34,000 votes cast. *Sabre Wulf* received 16.39% of the total votes cast, with *Jet Set Willy* hanging in well at 13.93%. Overall, the top ten games received 57.95% of the total vote, compared to last month's 61.17%. This means the rest of the chart shared out a few more percentage points between them, reflecting a slight tendency to even out the voting.

BRILL 'N' FAB HOTLINE PRIZES!!

Whether you phone or write in, all names go into the voluminous bag to be drawn monthly. First out receives **£40 worth of software** plus a CRASH tee shirt, and the five runners-up receive three issues of CRASH free plus a CRASH tee shirt.

Others may try and copy us but the CRASH HOTLINE CHART is the one that counts – and you are the people that make it count.

YOUR VOTE IS EXTREMELY IMPORTANT — USE IT PLEASE!

THE CRASH HOTLINE PHONE NUMBER IS 0584 (Ludlow) 3015

HOW TO USE THE CRASH HOTLINE

Method 1
Ring the Hotline telephone number (above) and record your votes on the answering machine. Please speak clearly, spelling out name and address if it's a 'difficult' one! List your five games starting with the number one.

Method 2
Use the coupon below, making sure you fill in all the details. Pop the coupon in an envelope and send it to us. Alternatively you may send a letter if you don't want to cut up the mag. ,

The telephone Hotline is getting very jammed after a new issue comes out, so bear with us if it's engaged. If all else fails – write in!

Adventure Trail Chart WINNER is **Andrew Rawlings**, Bishops Stortford, Herts. The runners-up are: **Simon Ward**, Kingston, E. Sussex; **Stephen Palmer**, Cardiff; **John Purslow**, Liverpool; and **Paul Clark**, Aberdeen.



This month's HOTLINE WINNER is **Tom Josephs**, Oxford; the four runners-up are: **David Boure**, Church Morecambe, Alfader; **Stephen Chambers**, Norwich, Norfolk; **P.A. Ford**, Leeds, S. Yorks; and **Steven Bupton**, Harpenden, Herts.

CRASH HOTLINE WRITE IN COUPON

Please use block capitals and write clearly!

Name ....

Address ....

....

Postcode ....

Send your coupon to: **CRASH HOTLINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB**

My top five favourite programs in descending order are:

TITLE	PRODUCER
1	
2	
3	
4	
5	

CRASH HOTLINE SPECTRUM SOFTWARE CHART

TOP 50 FOR SEPTEMBER

Figures in brackets indicate last month's position

1	(4)	**SABRE WULF** Ultimate
2	(1)	**JET SET WILLY** Software Projects
3	(6)	**CODE NAME MAT** Micromega
4	(3)	**ATIC ATAC** Ultimate
5	(2)	**MANIC MINER** Software Projects
6	(48)	**LORDS OF MIDNIGHT** Beyond
7	(5)	**WHEELIE** Microsphere
8	(7)	**LUNAR JETMAN** Ultimate
9	(20)	**PSYTRON** Beyond
10	(11)	**TRASHMAN** New Generation
11	(8)	**CHUCKIE EGG** A&F Software
12	(10)	**3D DEATHCHASE** Micromega
13	(13)	**POGO** Ocean
14	(34)	**MOON ALERT** Ocean
15	(30)	**MUGSY** Melbourne House
16	(9)	**FOOTBALL MANAGER** Addictive
17	(12)	**SCUBA DIVE** Durrell
18	(—)	**TLL** Vortex
19	(—)	**FULL THROTTLE** Micromega
20	(14)	**THE HOBBIT** Melbourn House
21	(21)	**3D ANT ATTACK** Quicksilva
22	(17)	**FRED** Quicksilva
23	(15)	**FIGHTER PILOT** Digital Integration
24	(19)	**NIGHT GUNNER** Digital Integration
25	(16)	**JETPAC** Ultimate
26	(22)	**THE QUILL** Gilsoft
27	(—)	**MATCH POINT** Psion/Sinclair
28	(49)	**KOSMIC KANGA** Micromania
29	(31)	**JACK & THE BEANSTALK** Thor
30	(26)	**VALHALLA** Legend
31	(—)	**STOP THE EXPRESS** Sinclair
32	(23)	**ANDROID 2** Vortex
33	(18)	**CHEQUERED FLAG** Psion/Sinclair
34	(25)	**BLADE ALLEY** P.S.S.
35	(44)	**AD ASTRA** Gargoyle Games
36	(41)	**ZZOOM** Imagine
37	(29)	**KRAKATOA** Abbex
38	(45)	**HUNCHBACK** Ocean
39	(—)	**TEST MATCH** C.R.L.
40	(—)	**ANTICS** Bug-Byte
41	(—)	**HALLS OF THE THINGS** Design Design
42	(—)	**SPLAT** Incentive
43	(40)	**SCRABBLE** Sinclair
44	(28)	**PYRAMID** Fantasy
45	(36)	**TRIBBLE TRUBBLE** Software Projects
46	(—)	**HULK** Adventure International
47	(32)	**ALCHEMIST** Imagine
48	(39)	**URBAN UPSTART** Shepherd
49	(—)	**WORLD CUP FOOTBALL** Artic
50	(—)	**STONKERS** Imagine



VOTE for the CHARTS



CRASH ADVENTURE TRAIL CHART

1	(1)	**THE HOBBIT** Melbourne House
2	(2)	**VALHALLA** Legend
3	(15)	**VELNOR'S LAIR** Quicksilva
4	(22)	**LORDS OF MIDNIGHT** Beyond
5	(8)	**MOUNTAINS OF KET** Incentive
6	(23)	**QUEST** Hewson Consultants
7	(20)	**CIRCUS** Digital Fantasia
8	(7)	**ORACLE'S CAVE** Dorcas
9	(17)	**SNOWBALL** Level 9 Computing
10	(3)	**ESPIONAGE ISLAND** Artic
11	(18)	**FANTASIA DIAMOND** Hewson Consultants
12	(9)	**PLANET OF DEATH** Artic
13	(—)	**MAGIC MOUNTAIN** Phipps Associates
14	(10)	**SHIP OF DOOM** Artic
15	(25)	**TRANSYLVANIAN TOWER** Shepherd
16	(24)	**CLASSIC ADVENTURE** Melbourne House
17	(14)	**GOLDEN APPLE** Artic
18	(—)	**THE HULK** Adventure International
19	(26)	**COLOSSAL ADVENTURE** Level 9 Computing
20	(30)	**DENIS THROUGH THE DRINKING GLASS** Applications
21	(29)	**PHAROAH'S TOMB** Phipps Associates
22	(19)	**LORDS OF TIME** Level 9
23	(13)	**INVINCIBLE ISLAND** Shepherd
24	(28)	**KNIGHTS QUEST** Phipps Associates
25	(—)	**SMUGGLERS COVE** Quicksilva
26	(5)	**INCA CURSE** Artic
27	(11)	**BLACK CRYSTAL** Carnell
28	(6)	**MAD MARTHA** Mikrogen
29	(—)	**MAD MARTHA 2** Mikrogen
30	(—)	**McKENSIE** Software Projects

PLAYING TIPS

It was obviously a ghastly mistake to mention Chris Colesell's POKE for getting rid of *Sabre Wulf* monsters in last month's issue – the phone lines were jammed the second the issue hit the street! I know how impatient you all are, but my life would be made easier if you could write in for the info – I'm still covered in bruises received from the switchboard people! As I said last month, we feel it isn't really fair to the software house concerned to release any cheats so soon after a game has come out, as it inevitably spoils the fun of many players. The same goes for the map, and in connection with out Sabre Wulf Map Competition, those who have rung up saying, 'What's the point' after *Personal Computer Games* publishing it last month, the answer is that our competition is for good cartographers, and anyone who thinks they can draw a good looking and accurate map – not the prove you can get through the game in a certain amount of time and with a certain score.

And now onto some of this month's useful tips received. I must stipulate again, that any listings which may be given here, are as the reader sent them in. They may not have been checked for accuracy or workability as we just don't have the time. I'll leave it up to you to write in and correct anything!

Chris Thomas of Upton, Chester writes: 'TRASHMAN; to be able to clear a road of dustbins you must collect all the bonus points offered by the inhabitants. When crossing the road, use the middle to walk up it. It is safe in the middle or if you are directly behind the lorry. ASTRO BLASTER. On the fourth screen with the large boulder at the top dropping bombs, go to one side of the screen (whichever is furthest away from the boulder) and it will not hit you with its bombs.'

Glyn Shatton of Penarth, South Glamorgan has worked out a routine to convert *The Hobbit* onto microdrive cartridge:
Miss out the first loader program and instead type:

```
10 LOAD * "m";1;"h1" SCREEN$
20 LOAD * "m";1;"h2" CODE 24576,40000
30 PRINT USR 27648
```

Now save this onto a cartridge with:

```
SAVE * "m";1;"hobbit" LINE 1
```

Now load in *The Hobbit's* title screen with **LOAD ""SCREEN$** and save this onto the cartridge with:

```
SAVE * "m";1;"h1" SCREEN$
```

Now load in *The Hobbit's* huge chunk of machine code with **LOAD ""CODE 24576**

Now save the machine code onto cartridge with:

```
SAVE * "m";1;"h2" CODE 24576,40000
```

Now type **RANDOMIZE USR 0** and then type **LOAD * "m";1;"hobbit"**

Has anyone worked out how to transfer *Zzoom* or *TLL* to drive?

Adrian Pickup (13) from Scarborough has the following to say about Thor's *Jack and the Beanstalk*: 'Screen 1: to escape from this you must collect the axe and get to the top of the beanstalk. Screen 2: journey in between the bricks and get the gold, then journey to the left of the screen. Screen 3: climb the brick wall and get the egg from its perch. Then climb down the rope and you will be rewarded. Screen 4: get harp from table by going across chair seat. If this is not done in time the giant will wake and you will have to chop the beanstalk down. Screen 5: get the goose!

In BLUE THUNDER always fly high on the way back or the invisible missile will get you. In DEATHCHASE the bikes shoot back on screen 25 and in LUNAR JETMAN you can find a trailer for your LUNAR ROVER on screen 10.'

Well now that's interesting, Adrian – the last two items. We've been here before! How have you come by this info? So far no one I know has seen bikes shooting back in Deathchase, *and Ultimate themselves have said there are no trailers in* Lunar Jetman *– who's fooling who here?*

The ever busy **Chris Sutherland** *from Inverness has sent in a routine for providing up to 255 lives on* Lunar Jetman. *It only works with player 2, however, so you'll have to select a two player game and kill off player 1!*

He says it's best to have 253 lives and this can be done by altering the number in line 70. This is because if you gain enough men to exceed 255 you will end up with no lives. The game will still end irrespective if the moon rover is destroyed.

```
10 FOR A = 1 TO 5: BEEP .1,A: NEXT A
20 POKE 23693,71: BORDER 0: CLEAR 32767
30 INK 0: FOR A = 1 TO 4: LOAD ""CODE: PRINT AT 6,0: NEXT A
40 POKE 23439,201
50 RANDOMIZE USR 23424
60 LOAD ""CODE
70 POKE 43117,253: PRINT USR 32768
```

Type in program, RUN it, and play tape.

S. Hennesey of London E3, was a bit incensed by our review of Postern's Psi-Spy *and thinks we missed the point entirely. To put matters right he has laid out the playing objectives of the game…*

In part one you have to run around a garden maze (set in a figure of 8) collecting as many rings as you can before 20 seconds are up. Then you have to try and survive the attack of a series of chasers. You kill them by running over flashing keys in a certain order so that the port cullis rises. It is then an easy matter to lure the chasers past the port cullis to kill them. Surviving a certain number of chasers moves you onto level 2. The object of the first part is to amass as many points as possible. You will eventually be caught and taken into the labyrinth and, depending on how well you did in part 1, you will be awarded points for intelligence, stamina and psi-power. Now you move from room to room trying to gain as many objects (including the 5 keys) as possible either by fighting or by buying. If you choose to fight you can 'probe' the opponent to see his weakness, but the more accurate your probe the more psi-power you use. You then press to fight and choose a weapon to fight with. Winning a fight enables you to collect any objects in the room.

You can, in certain rooms, swap points (transmute) from one category to another, eg. stamina into psi-power; and additional points are awarded if you can catch the Moon, a purple thing that appears regularly in any room. So simply waiting for it can bolster your flagging attributes! But beware – if you touch him when he turns white you will lose some points.

Thanks Mr Hennessy, I hope printing your letter will mollify the programmer of Psi-Spy, *who, like yourself, thought we got it all wrong!*

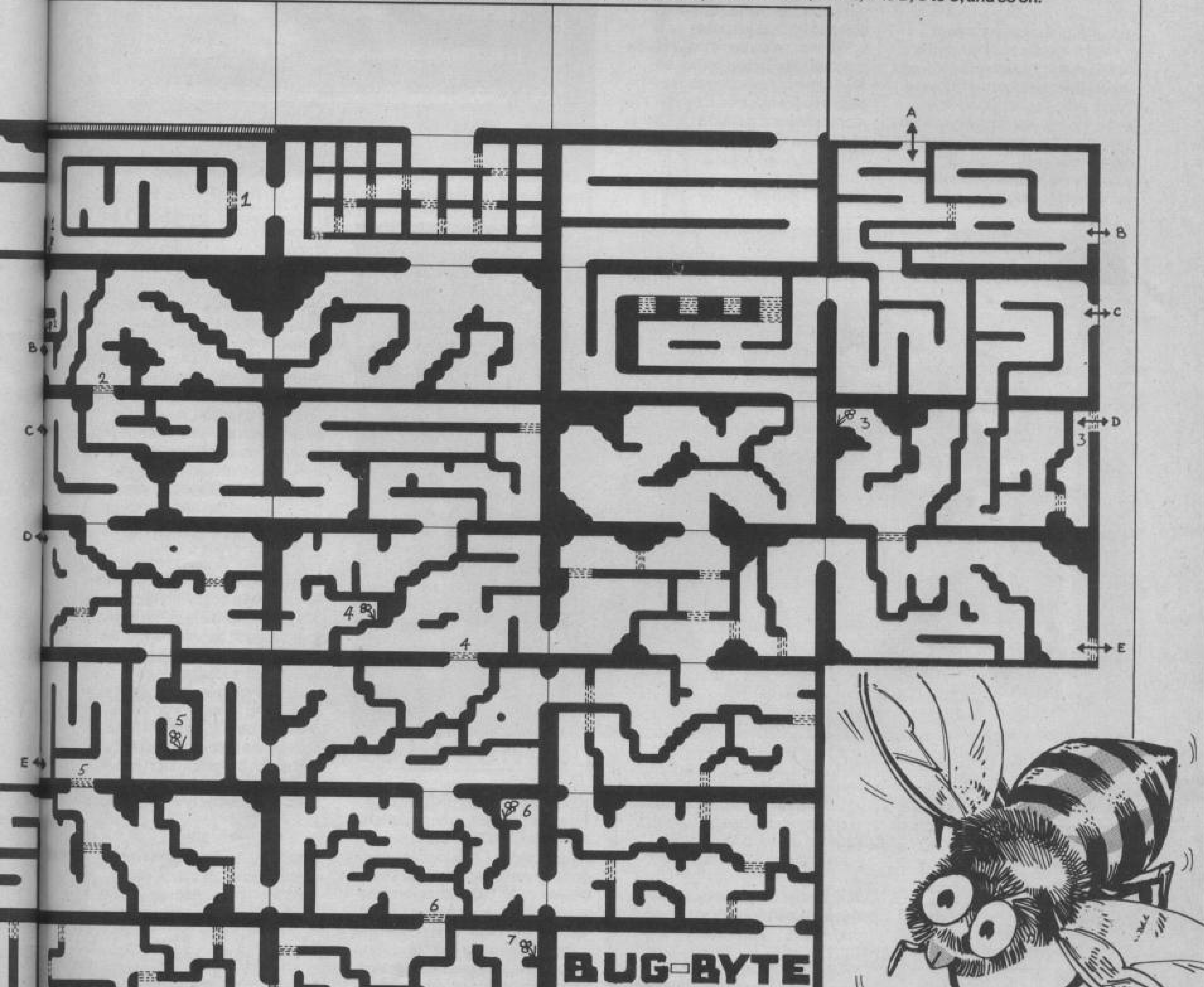
Dear CRASH,
A couple more POKEs to 'enhance' *JSW* – **POKE 37982,0** and **POKE 37994,0** will give our hero the power to walk through any nasties (a real time saver in the Forgotten Abbey eh?). You must still beware of the objects you bash your head on etc. Keep hacking!
Simon Homan, Harrogate, N. Yorks



Fergal O'Connor *from Liverpool, says this of* Alchemist: 'Get the lantern, vase, ring and gold (lead turns into gold by getting the spell which reads 'transform' and then press A to change the lead into gold). Each itme should be returned to the chest (in the temple to the right of the start screen). Once you have all the pieces of the scroll, get the spell which says 'shield', this should help you get into the warlock's screen, past the ghost. When you enter the warlock's screen keep pressing and then land next to the wizard. Again, press A and you should fire at the warlock and defeat him.

There are tons of letters about getting to the right side of the Banyan tree in JSW. **Charles Hart** *from Bourdon, Cheshire, supplies an answer.* 'I have found that the POKEs given by Software Projects to stop the 'Attic effect' also allow you access to the Conservatory Roof. The route is by the Banyan Tree. After you have jumped the saw there, jump over the spinning microchip so that you are on the pillar between the pink devil and the microchip. If you have the POKEs in, you can now jump into the blue overhang and you will stick up into it. You can now get over into the other of A Bit of Tree, thence into Under the Roof. After getting the four glasses in the Conservatory Roof, which takes a bit of practice, just drop to the right of the single squar above the word 'Roof' in the screen title. This gets you to The Orangery.

Bug-Byte's *Antics* seems to have been keeping loads of people occupied. Martin McGinn from Glasgow, sent us this map of the *Antics* maze, which we have checked out, and we think it's all correct. I say 'think' because *Antics* ain't that easy to cope with when you're dashing along trying to get several things done at once! In the map, exits from screens map to each other, A to A, B to B, C to C, and so on.



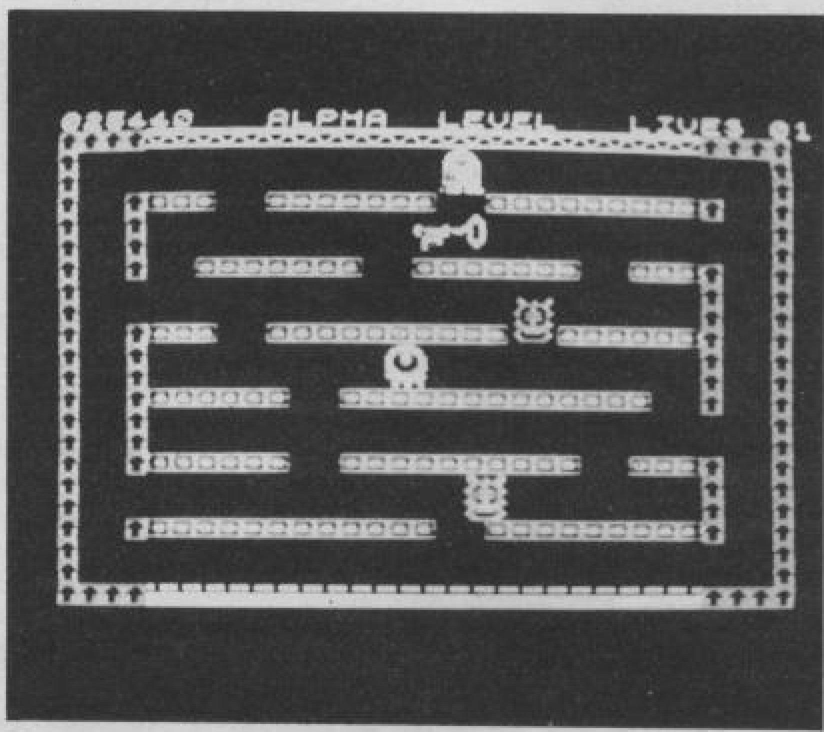
PLAYING TIPS

Stephen Crow from software house Poppy Soft sent us in some details on scoring in their new Factory Breakout *game, some of which may be in time to help players in our current competition...*

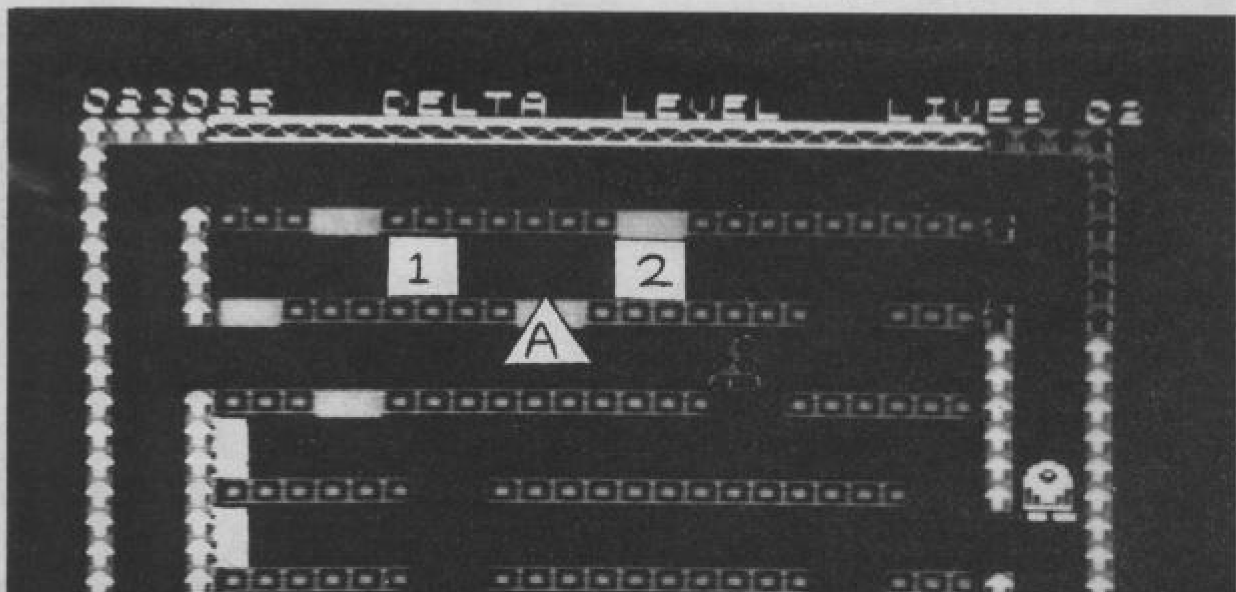
Screen 1: work around shooting the lasers approaching you, but remember that the lasers at the top take less time to reach you than the ones at the side. Screen 2: this is fairly straightforward until the conveyor belt starts up. Then it is best to wait to the right of each reject ray until the belt is moveing in your favour (scrolling left), then dash under the ray. Remember the lighter the colour, the faster the ray (white being the fastest). Screen 3: probably the hardest screen, but using the following tactics it is possible to complete without even using the force fields! Wait at the bottom of a screen until the fast yellow monster nearly reaches you. Then dash up a lift and wait at position 1 or 2 (see photo). In these positions the monsters will always come up through door A. You can then escape downwards through one of the two outer doors on that platform. Only use the force fields in emergencies or at the end of a screen to gain extra points.

The elusive screen 4 may only be reached after finding the key on level Omega. Using the above tactics I have reached screen 4 many times and gained a high score of 176,310. Can anyone beat this?

Well, can anyone???



Zirky's found the factory key



Dash up a lift and wait

Dear Crash,
After playing *The Crypt* for hours on end, I have found these starter words to get to each level of the game. They are:

1 = Carnell
2 = Software
3 = beats
4 = all
5 = the
6 = others

Has anyone else found any more?
Clive Davidson (12), Casiter-on-Sea, Gt. Yarmouth

Honestly, some software houses are so immodest, and if it really beats all others, how come it's someone else's software now?

A.E. Fisher *of Prestwick, Ayrshire, has a couple of cheats for* Tranz-Am *and* Antics:

TRANZ-AM: Load the program in the normal way until the main block of code has been loaded (the block after the SCREEN$). Stop the tape recorder and press BREAK, now type in as a direct command: **POKE 25446,0: CONTINUE** and start the tape recorder. Once loaded, you will find that you have an infinite supply of lives. In ANTICS, in some of the screens there is an exit close to a sealed off portion of the screen that cannot be easily got to, but sometimes it is possible by going out of the exit and re-entering the screen with the left or right button pressed. You find that you pass through the wall, but this can sometimes trap you.

Martin Kennedy *from Witton, Blackburn has this to say about* The Hobbit *and* 3D Ant Attack:

In the forest, when you see the bulbous eyes, wait, wait again, then go in your direction, then do this again till you are rid of them. In order to be certain of the East direction at the gate to mirkwood, when in rivendell say to Elrond, 'Examine map'. Repeat this and you will get some food and gain the east direction.

In *Ant Attack*, after rescuing 9 people, if you search the buildings you will find a box of ammunition. Also, if you have the girl (or boy) and you're right at the other end of the city – do as follows. Find any of these wall structures as drawn here – face the girl in front of you at the hole. Jump forward or go forward pressing jump and you will jump through the hole. Then just sit back and watch the girl jump on an ant and she too will jump through the hole – yet another one saved. Good luck.

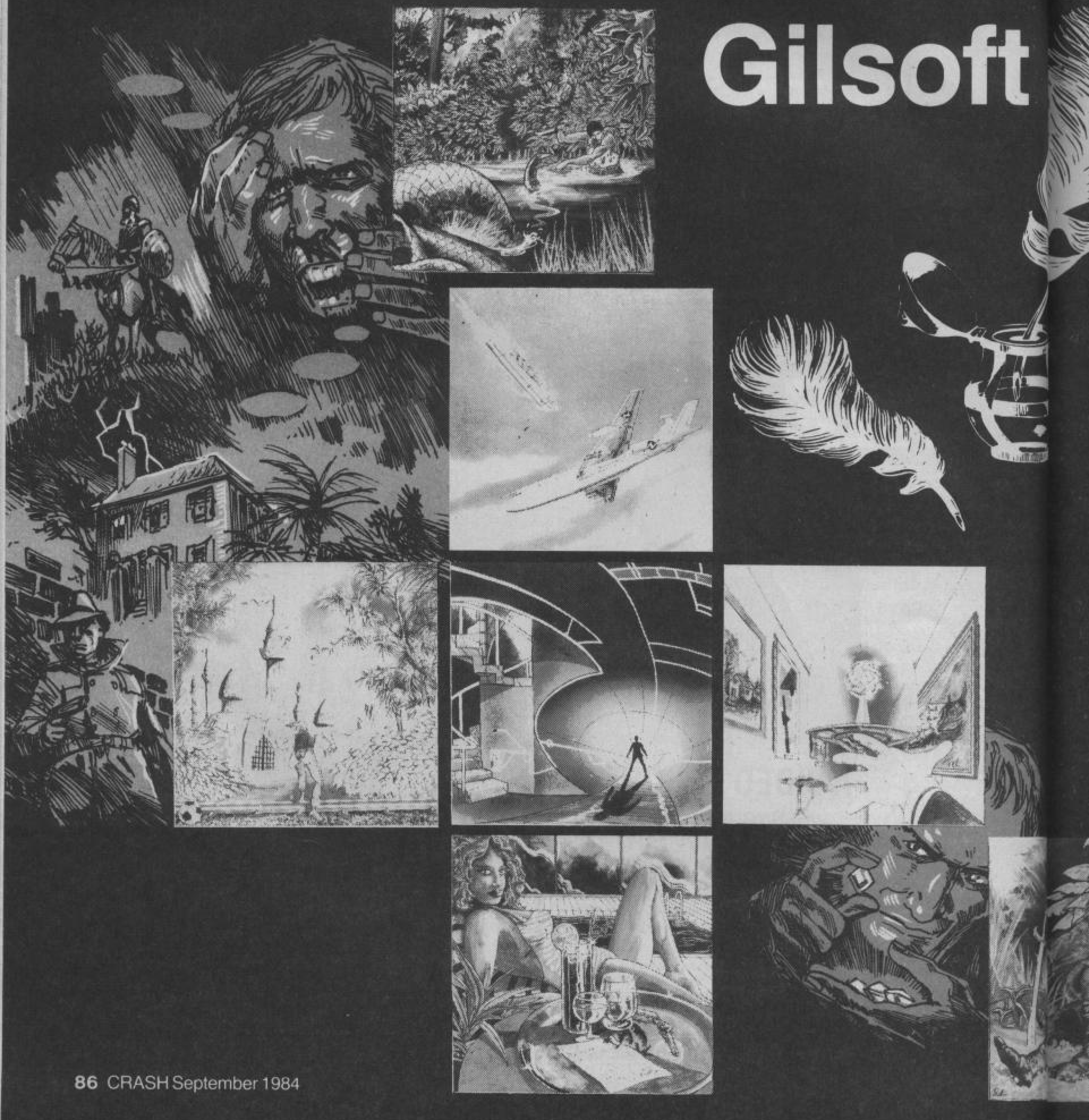
I must say, Martin, that the last sounds rather ungallant, sitting watching your distressed damsel doing all the work – still...

Crash Competition

OVER £1,000 WORTH TO BE WON!

FROM THE WELSH WIZARDS OF ADVENTRE

Gilsoft



ORTH OF SOFTWARE

TURE –



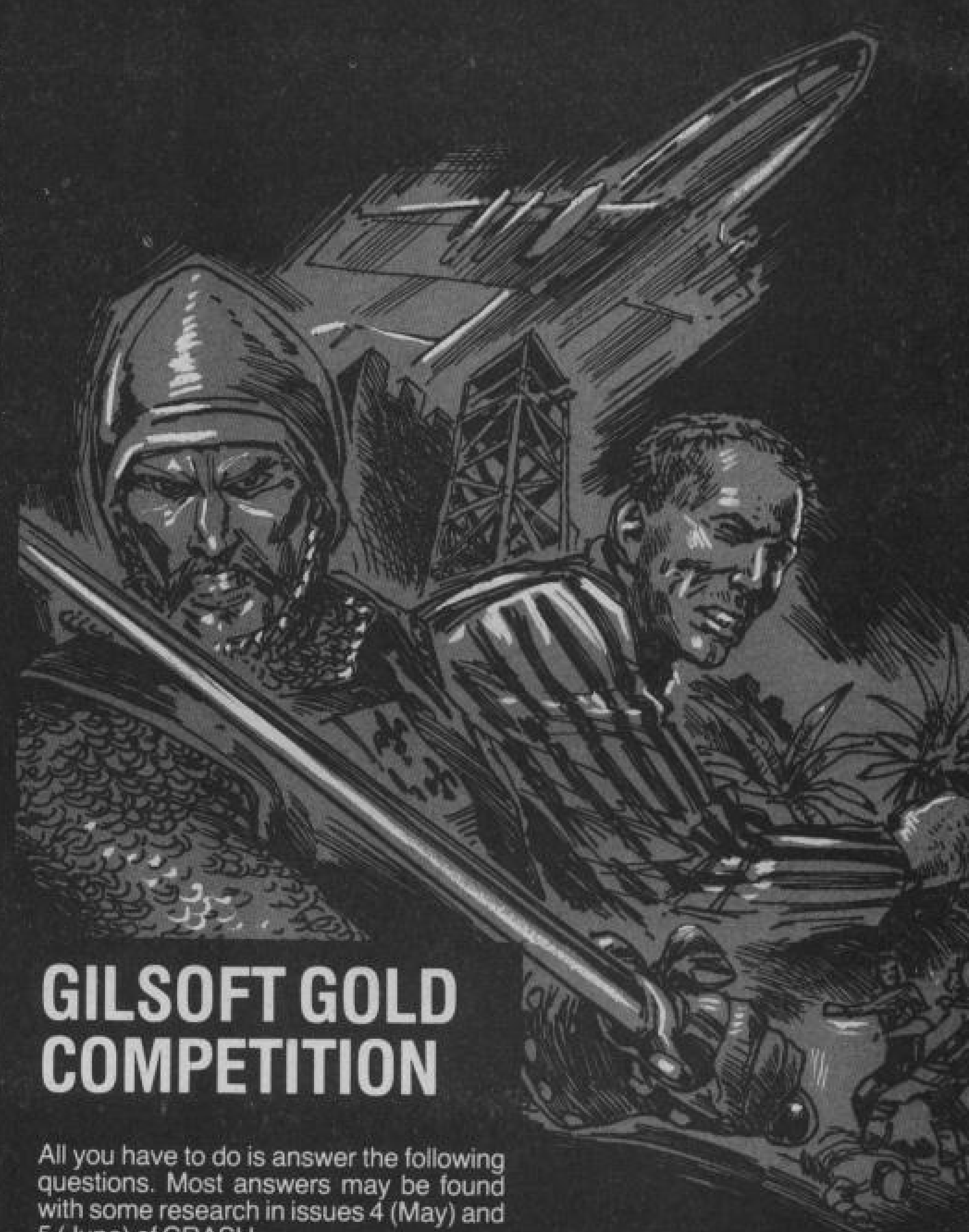
Back in May (issue 4) we reviewed several of the games from Gilsoft's **GOLD COLLECTION**. All seven games in the collection are adventures written with Gilsoft's utility **THE QUILL**. The utility itself has been riding consistently up the CRASH HOTLINE proving that many adventurists want to write as well as play adventures.

Very soon Gilsoft are launching their second Quill utility which will allow programmers to add graphics to Quilled text adventures. The Quill presently has some graphics facility and allows use of UDGs, but the new program is designed to produce full screen pictures which can be combined with games written on *The Quill*. The memory required to be able to run programs independently is afforded by eliminating the original Quill editor when the game is finished. Full screen graphics are accessed by a LOOK command. Highly detailed pixel type pictures will be possible, and the new utility has a fast FILL routine to make graphics generation fast. Gilsoft say that the new utility will be available in the Autumn at what will be a very reasonable price.

Two new Quilled games are soon due from Gilsoft. *The Hollow* has been written by **Tom Davies**, who brought us the atmospheric *Africa Gardens*. Howard Gilberts of Gilsoft says of *The Hollow*, that it doesn't drip atmosphere like *Africa Gardens*, it deluges! A man is walking on the cliff tops one day, and walks into a hollow in the ground where he is whisked back in time to an age of heroes. The authors of *Mindbender* have also completed work on *Madcap Manor*, which promises to be another bundle of fun and booby traps.

But for those among us who just enjoy playing, or indeed for those who would like an opportunity to see how other programmers have employed the ingredients of *The Quill*, here is a competition to win all the games in the first edition of **The Gold Collection**.

The collection contains seven games: *Magic Castle, Devil's Island, Spyplane, Mindbender, Barsak the Dwarf, Diamond Trail* and *Africa Gardens*. The first ten correct entries pulled out from the bag will each receive the entire set of games comprising **The Gold Collection**. The next hundred correct entries pulled from the bag will each receive a game of their choice from **The Gold Collection**. Entries should be sent (on a postcard or back of a sealed envelope) to **THE GOLD COMPETITION, CRASH MAGAZINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB** to arrive no later than **27th September**.



GILSOFT GOLD COMPETITION

All you have to do is answer the following questions. Most answers may be found with some research in issues 4 (May) and 5 (June) of CRASH

1. *Devil's Island* takes its name from a real place – what was Devil's Island?
2. In *Devil's Island*, what shouldn't you eat just after the start of the game?
3. 'They who live longest will see most,' is a proverb that could describe most adventures, but which game in The Gold Collection is it actually taken from?
4. *Africa Gardens* is an establishment – what sort?
5. The owner of Africa Gardens hopes you will never leave – who is he?
6. How many treasures are there to be collected in *Barsak the Dwarf*?
7. What is the central quest of *Magic Castle*?
8. What is the *Mindbender*?
9. In *Spyplane* Oceania is your 'home', but what's the name of the enemy mainland?
10. What is so unusual about playing *Spyplane*?





Rebirth of the Things

Crystal has been noted for its sophisticated programs for well over a year and *Halls of the Things* has been one of the most enduringly popular Spectrum games. Now the company has been reborn under a new name with a fresh image and re-launches itself with an exciting new space game, *DARK STAR*. Programmers **Graham Stafford** and **Simon Brattel** came to visit us and explain themselves and how Crystal transformed into...

DESIGN DESIGN



“...we get up when we want – we am v pub when we want. It’s not a job, can program better

When Simon and Graham arrived at the CRASH offices on a sweltering day late in July, the relative peace was shattered. As Graham sat down and began to talk, Simon busied himself transforming the editorial office into a tangle of cables, interfaces, monitors and computers. The occasion was to show off their new game, *Dark Star*, and introduce us all to Basil (who, despite the name, is female). Basil is a software development computer built by Simon specifically for writing games for the Spectrum. Admidst the rattle of keyboards and sharp odour of soldering irons, Graham explained where Crystal came from and where Design Design is going to.

CHANGE OF NAME

First of all I asked why they wanted to change the name from Crystal to Design Design. And why Design Design?

'It conjures up the right image,' says Graham. 'We design programs rather than sitting around in some isolated tower writing them. But the word Design on its own, or Design Software doesn't really sound right. The hard letter D at the front is good, but you should repeat it for effect, rather like Duran Duran – so Design Design.

'The thing is, Crystal goes back a bit and the name is associated with Chris Clarke's Crystal. Chris was one of the original founders before he moved on to Artic Computing. Now we want to alter the image. We want more contact with the magazines than we have had and we want to offer a more professional service across the board. We'd like the public to learn a lot more about us, because we like to think we're unique in various ways.' Graham points to the conglomeration of boards, connectors and chips that make up the emerging Basil. 'You'll see why in a minute,' he grins.

I ask him whether they are altering the name and image now because it's the low summer period and Simon looks up from his soldering to say that they release games when they are ready and not because of the time of year. But Graham adds:

'Well we have wanted to change the name before this. Last Christmas we did very well and we said, let's sit back, let's invest money in equipment, let's invest money in finding people to work. Let's do what we feel we've always wanted to do but never had the funds to do it. Because, you see, we all started from university as a bunch of guys who thought, look at this software that's being produced, we can walk all over it, and that's how we got together. The company is by no means what it originally was.

'Chris Clarke was the originator of Crystal. I was his partner. After a while, for various reasons, Chris left. *Invasion of the Body Snatchas* was about to come out. I wanted to change the name then, but a new software company coming out at Christmas is not a good idea. So we thought we'll continue on with the old name and then halfway through next year, we'll plan it all properly, we'll come out with some very special programs and let everybody know about it. I know there are programs of ours that haven't been received very well, although happily that's a rare occurrence, and we would like to think that by Christmas this year we will be more of a force than we are now.'

SEEDING A CRYSTAL

The software house we know as Crystal originated from Manchester University – specifically from two rooms in Owens Park Hall of Residence. Graham looked after the stock and the programming while Chris Clarke looked after all the administration. As the operation expanded, more programmers came to join them. The Manchester-based re-born Design Design now consists of a main core of four, Graham, Simon, Neil Mottershead and David Llwellyn. David is the company's administrator while Graham programs mainly on the Commodore 64. Simon and Neil work on the Spectrum and used to program as a partnership.

'They now program spearately,' says Graham. 'Not because they didn't program well together, because the results show that they did (*Halls of the Things* and *Warlock of Firetop Mountain*), but they wanted to pursue different avenues in games. Most of the games so fare have been more in Simon's vein than Neil's.'

Design Design operates from a large terraced house near Manchester which, for reasons of security, they would prefer to remain anonymous.

'Three of the four of us live and work in this house. Neil used to as well, but now lives with his parents in Stockport. In all there are six people and an office there. We program in our bedrooms – the rooms are quite large – we get up when we want – we program when we want – we go to the pub when we want. It's not a 9 to 5 job, because we've found you can program a lot better like that. You can program at night when there's no noise if you want.'

Simon glances up, Basil is almost ready. 'In fact most programmers seem to work at night,' he adds.

We laugh about Imagine's PR type ads where the programmers of the megagames are shown living off Coke and junk food. 'Well that's true,' says Graham. 'Programmers do need something. I need to smoke. Simon drinks Coke at horrific rates. Jon Ritman drinks coffee, thick, black tar! It's anything that requires mind concentration you see.'

How do the Design Design team go about writing programs?

'Most times it starts off as trying to prove a point, like with *Dark Star*,' Simon goes on. 'I thought you could do 3D graphics at speed and no one else did.

“We all started from university as a bunch of guys who thought, look at this software that's being produced, we can walk all over it...”



we program when we want – we go to the
t a 9 to 5 job, because we've found you
n a lot better like that."

When it's going we get all the people in the house, because it's almost a commune, and any of our friends, and we play about with the coding – what if we change the speed of the aliens, etc? And when that's done we don't go and play with it again until a couple of weeks or so, and then you do it all again. Eventually you end up with a program that's had a lot of ideas and different versions tried. Then I take it down to my brother, who's a school teacher. They've got 60 pupils with Spectrums and we give him a copy and say, right, pirate that! I come back in a couple of weeks and go in and see them playing and that's where I get my feedback from.'

Graham takes up the point about programmers. 'We think the programmer is important – people like a Simon Brattel program – they go and buy a Simon Brattel game – it's not the company they're buying. There's an awful lot of companies out there that are the Company Image. Just because it's Imagine, doesn't mean it's a good game.'

There's also the advantage of pushing the programmer instead of the company image, that when a game fails to excite the buyer, it doesn't necessarily put people off the company, I point out.

'Well, *It's the Wooluf!*, for example, did not get well received,' Graham starts.

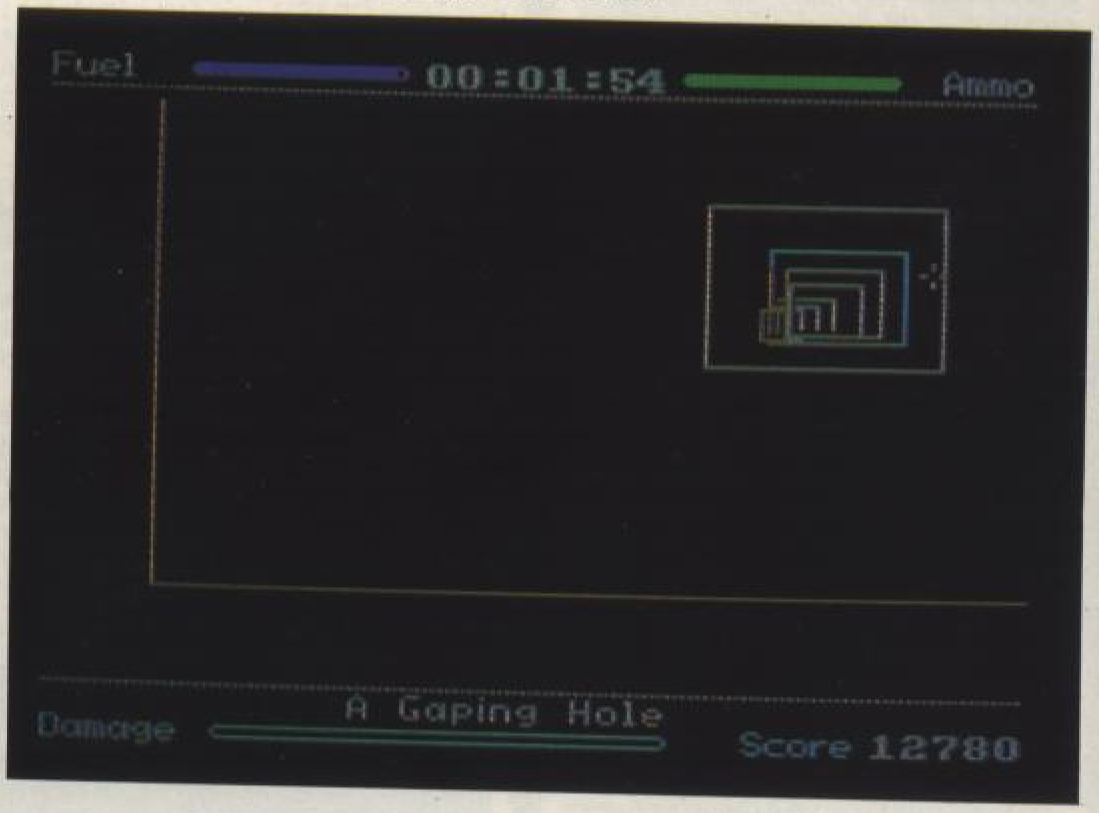
'It's my fault,' Simon interjects. 'Because I looked at it and said, ah, it's a sprite game. People like sprite games, let's sell it. It was a well written sprite game, but it's like a blind spot because we don't like sprite games so I couldn't see that it wasn't going to be received well.'

'Now we don't want that to impair the chances of, say, *Dark Star*, because it isn't the same person who wrote them both,' Graham adds. 'His next game (Martin Buller – *It's the Wooluf!*) is very good though – excellent. It's one of those car driving games like Atari's *Pole Position*. He's done it almost as well as the arcade. I'm really staggered because I'd written it off as one you couldn't do.'



Space screen from Dark Star

Hyper Space Tunnel from Dark Star



FROM THE BEAST TO BASIL

A clatter from Simon's long, customised keyboard announced that Basil is up and ready with a new game loaded from disc. But before we gather eagerly around the screen for the preview, Graham and Simon explain the equipment they have brought with them.

'As you notice,' Graham starts, 'we don't trust anyone else's hardware. We looked around for something to write software, but gave up. We're both originally electronic engineers so we did it ourselves. Simon's built all of his computers – he's never bought a commercial computer.'

'I did buy a Beeb,' Simon adds quietly. At this point he rumages about in an amazingly battered brown suitcase which 'saw his mother through the war,' and produces a long PCB strapped between aluminium frames and introduces us to The Beast. The Beast is the development system designed by Simon and on which *Halls* and *Firetop* were written. 'It became unreliable after a bit, so I designed Basil,' he says.

Graham takes up the story. 'Now Basil's got half a megabyte of RAM, the Z80 processor runs at 7 meg and the discs have got hundreds and hundreds of Ks flying around. It is specifically designed and devoted to writing software for the ZX Spectrum. We've got the Zeus Assembler in there, all written by

"...we do all our own hardware for writing the programs. We don't go out and spend £7,000 on Sages like Imagine did – it didn't get them very far."



Basil



The Beast

ourselves, the whole operating system and everything in there is tailor-made for writing software for the Spectrum. No one else we know has done that and that is one reason why we consider ourselves unqiue, in that we do all our own hardware for writing the programs. We don't go out and spend £7,000 on Sages like Imagine did when they were still alive – it didn't get them very far. You're wasting your money. Basil cost about £500 not including the discs. Imagine had 20 Sages and had placed an order for 34 more!' He looks scandalised at us.

'The one thing about Sage,' says Simon, 'is that for writing Z80 programs, Basil outperforms it by about 5 to 1 for speed because it's designed to.'

'So we've got the hardware side,' Graham continues. 'You can appreciate the hardware and how it works. You know that when you're doing a certain instruction *that's* how many T-states it takes and you know that's *why* it takes so many T-states. You can write more efficient and faster codes.

'So, as you can see, we're not a group of people who brought the ZX81 and learnt programming like that. We've got a very solid background in all aspects of computing. If you can build your own computers then you know how they work, you know how to pull the best out of them, you know how to really stretch them to the limits.'

REVIEWS & REVIEWERS

By this time CRASH reviewer Matthew Uffindell is anxiously hovering around the, as yet, blank screen of the colour monitor, awaiting a glimpse of *Dark Star.* But Simon has the game firmly bottled up inside Basil. 'Before we look at anything,' he says sternly, 'there's something I want to chat about, because I don't like the way you review games at all. This Use of colour, Use of sound – I mean, let's suppose Mike Oldfield, say, comes out with a new record; can you imagine any reviewer who said use of bass guitar, use of keyboard, would get very far?'

I tell him that I agree.

'Can you say that in the article?' he demands.

I agree to that as well and try to explain that when CRASH was first conceived I didn't want to have ratings, hoping that the reviews would stand on their own. But everyone else concerned with the project felt that magazine reviews had to have ratings.

Graham joins in. 'A case in point. On *Invasion of the Body Snatchas* we felt the actual review, what they said about the game, was very fair –'

'What they said about the game in the critical comments,' Simon interjects, 'was spot on. It has to be because it's someone's opinion.'

'But the ratings were wrong,' Graham says. 'It got 67% (*69½% in fact*) and they said this is a very nice version of Defender for the Spectrum, shame about the lack of sound. And then there were programs in the same issue that they said, this is absolute garbage but it's got nice graphics, as in 'big blobs moving around'. And it was getting the same overall mark. So we felt unfairly done to because if someone had read the two reviews they would have felt that *Invasion* was a far superior program to the other one; BUT if they just looked at the ratings (which an awful lot of people will do) and then read the review if it looks like a good rating, then they would get totally the wrong idea.'

We go on to talk about the ethics of reviews in general and Graham points out that they differ with CRASH in several respects where games we think are good, they think are not. But clearly the game that has most annoyed them recently in *Psytron.* 'It really got up our wick,' Graham says indignantly. 'Not because it's selling well but because they get up and say that *that* program makes other programmers gasp! And it doesn't!'

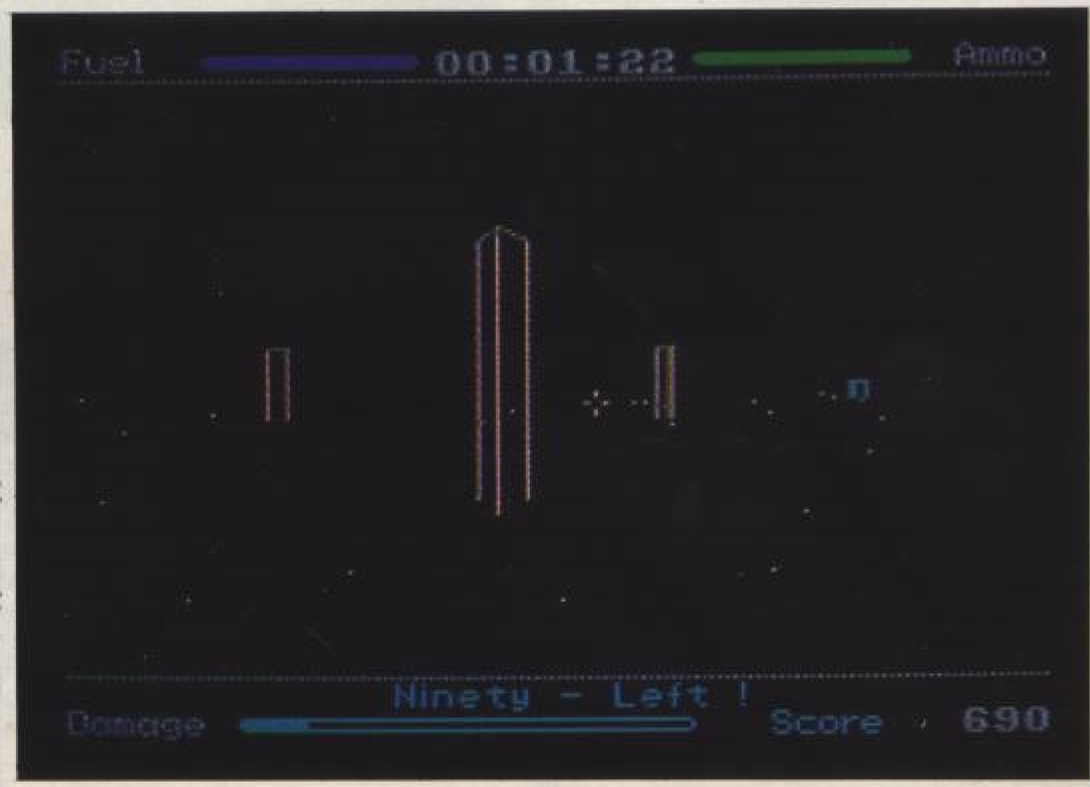
'If you're not an honest programmer you're not going to write an honest game,' Simon adds. 'We know a lot of programmers in the industry and you find that programmers have a very different opinion of their games to the market.'

So how does he feel about his games? '*Halls of the Things* is *our* game. It's leaps and bounds above anything we've ever done. That's an honest opinion. It's not my program because three of us wrote it. I don't necessarily like my own programs just because I wrote them. That would be stupid because if you had that attitude you would accept any old garbage. Programmers can't have that attitude. I hate *Invasion of the Body Snatchas.* I don't like the game. *Rommel's Revenge* was a disaster. I don't know why people like playing it because it's too slow.'

What about the reviewers' accusation that *Invasion* lacked sound?

'There's this class of games which are very predictable. A case in point – I'm not insulting it – is *Manic Miner.* Matthew Smith knows exactly how long it's going to take to do each frame of display because he'll save on the monsters, they're always

Planet screen from Dark Star



about the same size and speed, so he can make noises because he can interleave the highs and lows as it is predictable. In *Invasion* you can't do that because there's a random number of monsters, there's a random number of projectiles, the landscape changes, all the times vary so you can't get up and actually make a proper noise. What you have got to do is stop the game, make the noise, and carry on. Of the other versions, *Defenda* (Interstella) is silent – they've seen the problem, *Starblitz* (Softek) makes noises and you can see it jerk. This is why we didn't put sound on the screen.

So, if Simon dislikes *Invasion* so much, why do it in the first place?

'I did it to prove a point. A friend of mine and I were playing Beeb Defenda and he said you couldn't do a Defender on the Spectrum anything like as successfully as Acorn Soft's. I got up and said you could and spent the next two months regretting it! And that's also what happened on *Dark Star*. The same friend said you couldn't begin to do proper 3D graphics at high speed on the Spectrum. I thought, right! I hate 3D games, they're all dreadful, they're slow, none of them do the stars properly, they're all terrible games, they all look hacked. Let's get up and do something about it. So *Dark Star* was developed from someone saying you couldn't do it properly.'

PIRACY

By now everyone is watering at the mouth. When will the amazing *Dark Star* be revealed? Not yet it seems…

Talking about releasing games naturally leads to discussion of piracy. Design Design seem to take a very philosophical view of it all. Says Graham, 'We wouldn't go and sue a kid for copying our program. We'd have a go at any company that does it. Someone did it with *Rommel's* and we're in the process there. Luckily, though, none of our games have been a *Sabre Wulf* or an *Atic Atac* such that if they run off a thousand illegal copies and dump them on the market nobody's going to notice those extra thousand and they're definitely going to sell because it's only been out four days. Ours seem to sell steadily for a long while. It's incredible how *Halls* still sells.'

MSX AND THE SPECTRUM

So how many programmers are there working at or with Design Design? Graham isn't specific, apart from the actual members there are a number of others who market through them and the four men in the team are in contact with other well known programmers who contribute to the spirit of Design Design but go their own way in marketing, like John Ritman (*Bear Bovver*).

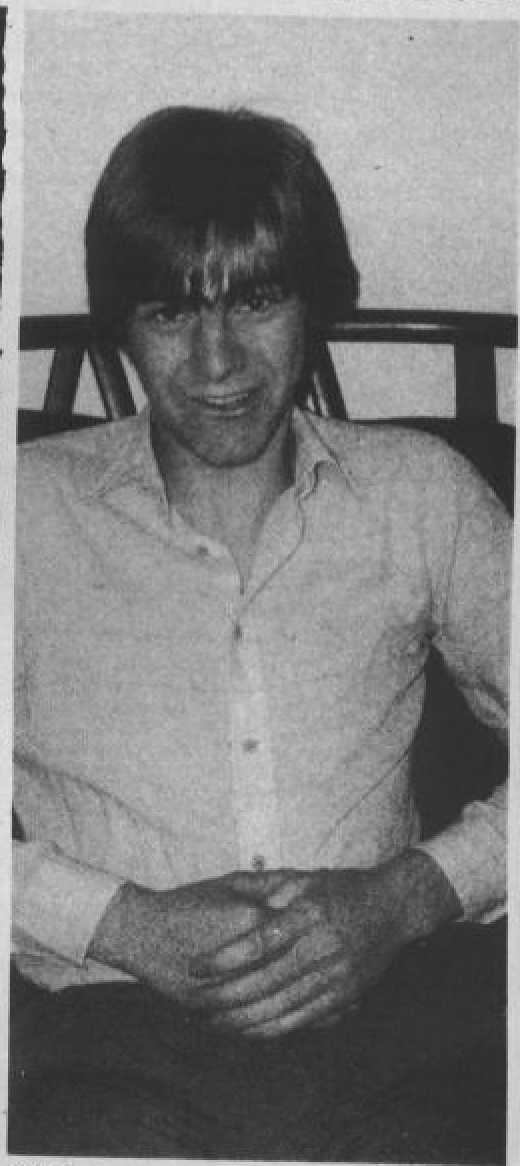
'Well on the Spectrum front we've got a lot of good programmers,' says Graham. 'We've also got a good Dragon 32 programmer. Some our Spectrum programmers will be time-spliced to do work on the Amstrad because the Amstrad is a nice machine. You can forget MSX!'

Simon, who has been sitting at his keyboard playing Space Invaders to keep

"MSX is a terrible standard…I've seen some of the MSX games and a lot of people looking at them say, oh they're garbage but they'll get better. But it WON'T get better. You can forget MSX!"



Simon



Graham

Matthew Uffindell on a keener edge for the revealing of *Dark Star*, suddenly leaps animatedly to his feet. 'Can we put a point across about MSX?' We all look up expectantly. MSX has been on everyone's mind recently.

Simon walks to the window and turns around. 'MSX is a terrible standard. It is terrible,' he repeats emphatically. 'I'm speaking as a designer. That's why I was stressing I can design computers. Because no one's gone on about the hardware on the MSX. It's got a sprite chip. There are going to be a lot of companies in the market who write sprite type games who will love that computer.'

Graham joins in. 'Ocean, although they're not too keen on the MSX, think it's reasonably good and they prefer it to the Amstrad. And the reason is because on the Amstrad you've got a raster display like on the Spectrum. You can do whatever you want with it. BUT you've got to *think* about it and write software to drive it. On the MSX you just do this pretty shape and shove something out of a port.'

Simon taps the edge of the desk firmly. 'Let's get this straight. Sprites are fine, I'm not anti-sprite. But you cannot have ONLY sprites, and that's more or less what MSX has done. Because you can't get at the video display memory. I'm seriously opposed to MSX. People are going to fall left, right and centre for MSX because it suits their sprite games. But in six months time, when everybody's tire of sprite games, there's going to be no alternative. The software industry will go poomph!

'On top of that,' he continues agitatedly, 'I don't think a standard is good for the software industry. At the moment there are lots of software houses who eke out a living because they are very good in one particular niche. If you've got a standard for machines so you can write one game for all computers on the market – supposing this horrid situation should ever arise – then the software houses who are best at sprite games are going to crush everyone else. It's not good for the British computer industry to throw it all away to some Japanese standard that isn't really a proper standard anyway.

'Another point is, it is claimed, that MSX has good graphics. I'd just like to reinforce this point – graphics doesn't just mean pretty shapes. *Dark Star* does not have pretty shapes – the reason it's got good graphics is because it moves fast. Graphics should be interactive. Now the thing about MSX is that the update on display is so slow that you can't do vector graphics so you won't be able to do 3D games like *Dark Star*, *Rommel's Revenge* or *Combat Zone*. I've seen some of the MSX games from Japan and a lot of people looking at them say, oh they're garbage but they'll get better because the Spectrum games got better. But it WON'T get better! Because MSX isn't an open-ended system. Spectrum games were awful when they first came out because

they programmers didn't know what they were doing. But because the display is versatile you can get to do better and better things with the machine. The Spectrum encourages you to write different programs for it. And a programmer can't ask for more than a good processor like the Z80 running fast, a reasonable amount of memory, which the Spectrum's got, and a display which is easy to get to.'

We make the analogy that the musical equivalent of MSX in the music recording industry would force musicians to write in only a very specific way, limiting music to a single type. Simon points out that the Spectrum, which isn't a sprite machine nevertheless has probably the best sprite games written for it, like the Ultimate games.

Well what about the QL then? There's a moment of silence and they both laugh. 'Hah! Forget it, it's terrible, it's already failed. We knew it would,' says Graham.

DARK STAR AND BEYOND

Finally, the moment arrives. Simon is clacking away noisily on his extraordinarily long, custom keyboard, calling up bits of *Dark Star* from disc and dumping it into the Spectrum. As the first sheet appears, deep space, spinning plasma bolts, alien ships, an amazing star field moving in perfect 3D, we gasp at the sheer speed of the graphics. No one has seen such fast or smooth animation. 'Star Wars' someone mutters, recalling the great arcade favourite of recent months.

'I don't mind the association with Star Wars,' Simon says as he deftly keys himself between two zooming tower blocks (he hates joysticks). 'The thing is, though, that we thought of it before Star Wars and it does look like Star Wars. It was an original game and fate ★★★★ on us!'

"I will try and do noises on *Dark Star*. But it's basically that if you put noises in you slow down the game."

Each Crystal game has incorporated some sort of innovation like the loading routine which gets rid of the flashing border, like the proportional spacing used in Hi-score sheets – *Dark Star's* innovation is its amazingly flexible front end which incorporates, for the first time ever on the Spectrum, truly user definable keys. And they mean KEYS because on *Dark Star* you can define any key (except the top row) to a function, you can have as many keys as you like to control a function and indeed you can have the same key controlling two or even three functions. This means, for instance, that it is possible to select accelerate and fire at the same time if you wish, or keys to make your ship accelerate and dive whilst banking to the left – and so on.

There are three sheets on *Dark Star*, although the game is still in its unlinked pieces, and it may be that more detail will be added before its planned release. There is a space sheet where you are attacked by alien saucers firing plasma bolts and you can fire back. You can also enter hyperspace fields which take you into the second sheet, a startling 3D warp tunnel which weaves all over space. This more resembles a road race game, because you can fly out of the tunnel and see it weaving through space below or to the side of you, but the longer you are out of its enclosing protection, the more damage you sustain. The third screen takes place down on the planet surface, the stars now forming the lights of a huge city. Tower blocks rise into the night sky, some of them friendly, some alien and firing at you.

Behind all this action, there lies a strategic plot about rescuing princesses from towers, accomplished by battling the enemy for planets to gain supreme control. If it all seems too difficult, Simon has designed the front end to allow the player to completely customise the entire game to suit players' skills and growing abilities.

And what about the sound? Simon gives a short laugh. 'I will try and do noises on *Dark Star*. But it's basically that if you put noises in you slow down the game. So what we shall doe is hack things into the divide routine. In between sheets we'll do something.'

As the others get to grips with *Dark Star*, Graham tells me about Design Design's other new games. They're releasing *Halls of the Things* for the Commodore soon, there's another space game provisionally nicknamed *The Spinning Around Game* which is for the Spectrum. Martin Buller, who wrote *It's the Wooluf!* is at work on a racing game and the team are at work on the sequel to *Halls, Return of the Things*, which should be ready for Christmas. 'If you think the monsters were mean in *Halls*, wait until you see them in *Return*!' Graham says enthusiastically.

After some four and a half hours, Graham and Simon pack away all the equipment. Basil is returned to her battered suitcase, the one that saw mother through the war, and the two programmers head north for Manchester. We plan to make arrangements for a photographer to visit them next week to get pictures of everyone and then peace settles once again on Ludlow.

ROGER KEAN

THE MACHINE CODE TUTOR

You are sitting in the cockpit of a Lear jet at 1000 feet and approaching the runway at a sickening speed. Damn the instructor! Okay, so he had given you the instruction manual on how to land this bird a fortnight ago, and you have read it over and over again and think you know the proper procedure, step by step, on how to approach the land. The instructor had said it would be dead easy and yet, where is he? He isn't sitting in the co-pilot's seat, talking you gently down, guiding you along and making sure that you develop a hands down experience and live to see it... He knew your survival chances were zero and that the result would be a CRASH!

Learning machine code may not be as dangerous as learning to fly, but the same principles apply. You may buy a book on how to learn machine code, read all about the different commands and their effects, then try them out entering the mnemonics, assembling and running them by entering the famous last words: **RAND USR... CRASH**!

A long wait... Nothing. A sigh and a reach for the Spectrum power plug. You may not die, only your pride is hurt and you do get another chance... after loading the assembler again. The trouble is you don't know what went wrong and begin to have doubts about your ability to learn machine code. Worst of all you will only enter the examples following the book word by word, for safety reasons, but without really knowing what you are doing. You won't stray and experiment, because you could CRASH again...

Well, why risk life and limb, when you can earn your wings in a flight simulator. No danger here, your approach is recorded, all the instrument readouts monitored and if something goes wrong, such as forgetting to lower the landing gear, you just step out, get told off by the instructor and have another go. Wait a minute, why not develop a simulator for machine code tuition?

Well, **Malcolm Evans** has done just that. Stick the L-plate on your Spectrum and follow the leader:

THE COMPLETE MACHINE CODE TUTOR

The first aid kit comes in a plastic enclosure and consists of two cassettes and, oh no, the dreaded manual.

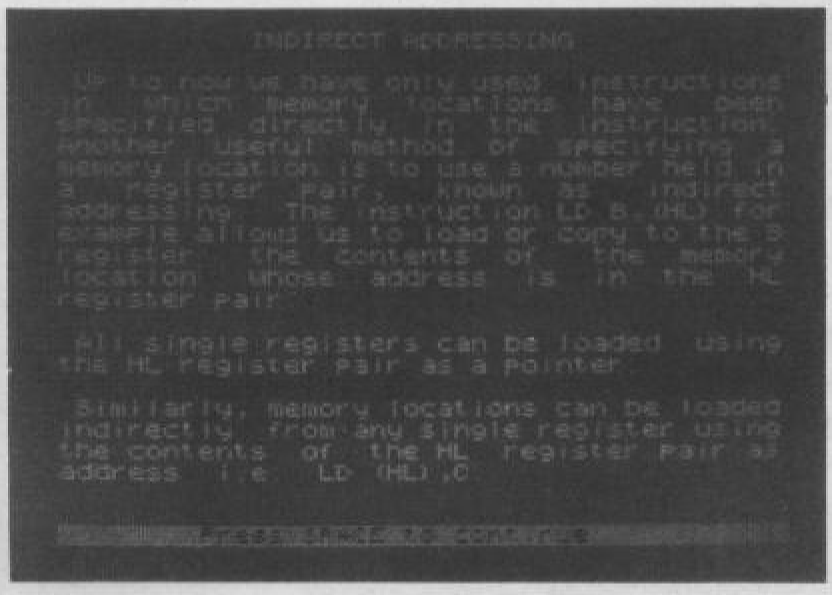
The assembler/simulator program is recorded on each cassette followed by groups of lessons which you are asked to load from within the program. You can also select not to load any lessons and proceed to experiment on your own using the assembler and simulator as a general purpose training ground, but if you are a newcomer, you'd best stick to the lessons to start with.

PROCEDURE

The Complete Machine Code Tutor (TCMCT) covers in 35 lessons all the instructions on the Z80 microprocessor. Each lesson consists of a detailed description of the instructions with all their effects registers and flags, followed in most cases by an example program. This example shows an application of the instruction and forms the basis of the exercises. The example is displayed as an assembler listing with memory address, object code and source code. To see the effect of the commands, the program may be 'run'. The simulator takes charge and lets you single step through the program, displaying after every step the latest register, flag and stack contents on the lower part of the screen. The example may be rerun several times and when understood there is the option of editing the existing source code of the example and experimenting with the commands to hearts delight. The code is reassembled and the simulator activated. It is here that you will notice that the simulator is highly intelligent, avoiding any program crashes and displaying your lapses with English error messages.

It is this feature which can endear the TCMCT even to experienced machine code programmers, as it allows you to experiment without ever getting into serious trouble. It eliminates the reluctance to risk daring manoeuvres and gives you the necessary confidence to learn machine code.





THE MANUAL

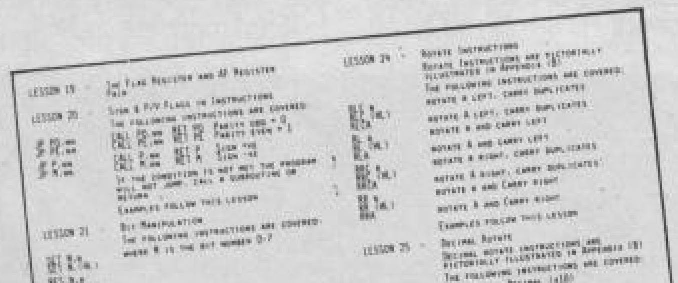
The manual need only be read at the beginning. A list is given of the assembler instructions recognised. These pseudo-ops are commands to the assembler instead of to the processor and consist in this case of **DEFC N** (Define byte), **DEFW NN** (Define word) and **BIN N** (same as **DEFB N**, but the simulator will display the memory contents in binary rather than hex or dec code).

Next to this list thirteen error messages are listed, which the assembler will display upon aborting the assembly. These include error trappings such as unknown instructions, missing spaces, brackets or numbers, too large or labels too long or not found etc, are very comprehensive and should pinpoint the offending item quite clearly. There are also six different error messages listed which will appear when the simulator tries to run runaway assembled code. These include useful items such as:

PROGRAM COUNTER HAS JUMPED TO NON VALID ADDRESS: PC jump to an address which is not the beginning of an instruction line.

YOU ARE TRYING TO RUN CODE IN ALLOCATED STORAGE AREA: PC jump to a storage area.

YOU ARE ABOUT TO AFFECT MEMORY AREA NOT ALLOCATED TO YOU: You are trying to load a memory location not allocated to the work area (16384 to 23295 and 32000 to 32192 allocated).

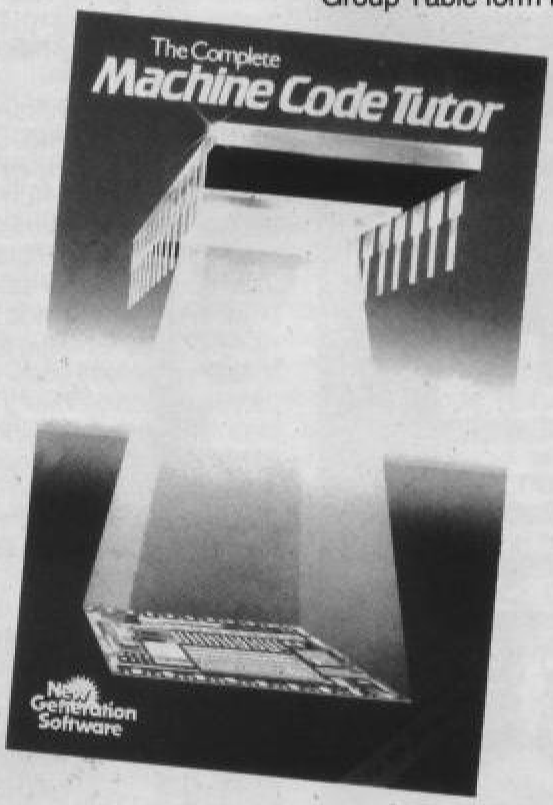


YOU ARE ABOUT TO WRITE MEMORY WHICH WILL AFFECT YOUR PROGRAM: You are trying to load a memory location within your program instructions.

THE STACK POINTER IS OUTSIDE ALLOCATED MEMORY AREA: SP outside 32193 to 32255.

THERE ARE TOO MANY REGISTERS CALLED UP: Too many registers are used, but the simulator will run displaying only part of these registers.

A list of all keys used at various stages of the assembler/simulator with a full description of their functions is given, but the layout is so logical that after two minutes of use you will feel at home and be able to concentrate on the lessons.



Of beneficial use is the list of all the lesson headings together with a summary of the Z80 instructions, so that at any time the appropriate lesson may be recalled for further study of a particular instruction. The appendix contains tables for the effect of instructions on flags and the obligatory pictorial description of the shift and rotate functions. A very useful idea is the glossary, which should help the beginners understand the necessary computer jargon which separates the men from the boys...

CONCLUSION

The TCMCT is the first of its kind of program which gets the Spectrum owner on to a good footing with machine code and eliminates all the usual anxieties and long recovery procedures (from CRASHES) associated with machine code experimenting. The lessons include all the Z80 commands. These are explained in detail on screen, but for the total beginner it may be necessary to read a more general description of a microprocessor system with explanations of the various function blocks and the general modus operandi. It is highly recommended to purchase the Zilog Technical Manual, which not only gives a short and precise description of the Z80 CPU architecture, but also provides a reference manual for all the commands in the practical Group Table form together with the necessary execution timings. It must be understood that TCMCT is only intended for exercising machine code, so no provision is made for relocating the assembler/simulator or for positioning the object code at a specific memory start address. TCMCT is not a full blown assembler/editor/monitor with which complete commercial programs may be written. It is however the best machine code tutor and no serious Spectrum programmer should learn machine code without it.

Franco Frey

THE MAC
INE CODE TUTOR
E TUTOR THE MACHINE CODE TU

UPDATE:
Cross had struck a bargain to deliver a working space vessel to Vilgarre. If he failed, Vilgarre would kill the surviving passengers of Cross's ship, if he succeeded, Vilgarre would take the ship and kill everyone anyway – not exactly a rosy future. The present was pretty bad too – finding a ship on a decadent world of a decaying Dyson System made needles in haystacks look very easy…

THE TERMINAL MAN





STORY BY KELVIN GOSNELL© DRAWN BY OLIVER FREY©


HOURS LATER, THE DESCENT LED TO A WIDE LEDGE, ONE KILOMETRE BELOW THE RIM...
CROSS, IS THAT A SETTLEMENT ON THE WALL? DOWN WHERE THOSE BIRDS ARE FLYING?
YES, IT IS A SETTLEMENT, BUT THOSE ARE NOT BIRDS...
THEY'RE INHABITANTS! RIDING THE CONSTANT UPDRAUGHT FROM THE LAVA - THE MOST NATURAL FORM OF TRANSPORT, HUMAN INGENUITY NEVER CEASES TO AMAZE ME...
I'D WORRY MORE ABOUT HUMAN AGGRESSION IF I WERE YOU - THEY ARE **NOT** FRIENDLY!
NATURALLY - WE ARE ABOVE THEM THEREFORE WE ARE A THREAT - IT'S THE FIRST RULE OF AERIAL COMBAT
- AND SINCE SOME ARE STILL **BELOW** US...
WE CONTROL THE GAME!
CROSS' METABOLISM WAS A BIZARRE MIXTURE OF **HUMAN**, **COMPUTER** AND **VIRUS**, THE COMPUTER PART OF HIM JUDGED ANGLES, RATES OF DESCENT AND...
UURGH?!
AARGH!
- HIS COMPUTER HAD ONCE CONTROLLED AN INTERSTELLAR LINER -
NO-OOOOO!
- HANDLING A PRIMITIVE SAILWING IN COMBAT CAME EASY - AND DEADLY!



Next: The Blind Death...

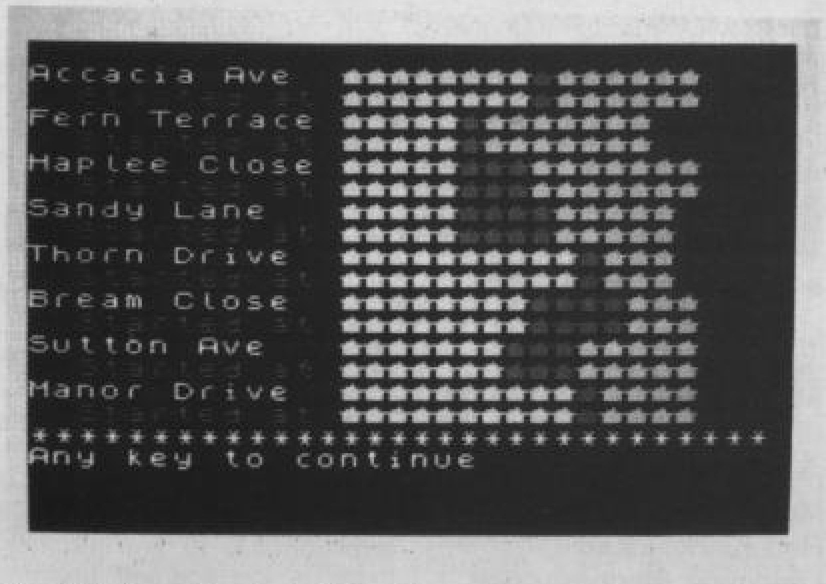
ELECTION

Producer: **Mastertronic**
Memory required: **48K**
Retail price: **£1.99**
Language: **BASIC**

The aim of the game is to defend the parliamentary seat of Pendell by choosing your manifesto from given points, within 10 days and with a budget of £5,000 and any donations you may collect along the way. In other words *Election* is a strategy/options game.

At the start of the game you must select the party you wish to represent, Tory, Labour, Alliance; and then choose three of the points offered for your manifesto. You are shown what points the two other parties are campaigning on. Pendell is split up into 24 streets, and the political colour of Pendell can be seen as the streets are listed showing how many houses support the various parties. From then on the game offers up the usual allowance of options such as attending meetings in different streets, where value points are provided for you to use in answering questions tabled. You may rent billboard space in specifically offered streets, or buy advertising space in the local newspaper. Then there's the street by street canvassing, when you may choose how many to visit in a day. When renting billboard space, attending meetings or canvassing, the program informs you of the political colour of the street in question.

In between the campaign activities, various random disasters can strike such as your campaign manager running off with the funds. When the 10 days are up, it's time to sit back and watch the votes come in, street by street.



The political colours of Accacia Ave to Manor Drive – Election.

CRITICISM

● 'Standing for parliament is one thing but defending a seat in an unresponsive town like Pendell is another matter. This game seems to have been put out unfinished and it's very uninteresting and very boring. I wonder whether the programmer ever played this game...?'

● *'For £1.99 this must be one of the best value for money games I have seen. The election simulation is rather absorbing and addictive. Several correct political opinions are in there, like Common Market, defence, unions etc. It really is a good game, I thoroughly enjoyed it. On the subject of low budget games such as this, I would say that the text type simulation would usually be the best value for money as low budget games are rarely written in machine code for super smooth graphics, so the BASIC type which do not rely on graphics, like this one, are better suited.'*

● '*Election* actually seems interesting for the first few minutes, but then it becomes tedious. You are following the same limited number of options time after time for ages. A day seems to take forever, but the worst isn't over. When the game is complete and you 'sit back' to watch the results coming in, the twenty four streets take almost 15 minutes to complete. 15 minutes when all you do is sit back and yawn. I really can't see this being thought of as exciting – after all, it is a simulation, not reality, and therefore has little of the real excitement attached to an election, and no justification for the long wait.'

COMMENTS

Control keys: general entry
Use of colour: generally uninteresting
Graphics: mainly text with small characters for houses
Sound: poor
Skill levels: 1
Originality: election games are hardly new, and this one has little to offer apart from the long election day sequence
General rating: two reviewers thought it a waste of time, one thought it above average to good.

Use of computer	40%
Graphics	N/A
Playability	28%
Getting started	35%
Addictive qualities	38%
Value for money	45%
Overall	**37%**

S.O.S.

Producer: **Visions**
Memory required: **48K**
Retail price: **£5.95**
Language: **machine code**
Author: **Simon Ffinch**

S.O.S. stands for Save Our Souls, the international distress signal. You may already know this, but if you don't the learned intro on the cassette blurb will tell you. In this case the S.O.S. is coming from stranded astronauts on a planet surface and it's your job to fly a shuttle down to the ground and rescue them.

From this you will already have gathered that what we have here is another 'Rescue' or 'Lunar Lander' type of game.

In this version the animated mothership is quite large. Your shuttle is equipped with a thruster and laser fire which shoots a beam out in the direction of vertical movement. It's needed because there are asteroids in plenty on the way down and firing aliens on the way back up. Each astronaut, there are six, must be rescued one at a time by landing on one of three platforms on the planet's surface. With each landing the platforms are reduced in usefulness, thus reducing your choice of landing sites as each rescue is carried out.

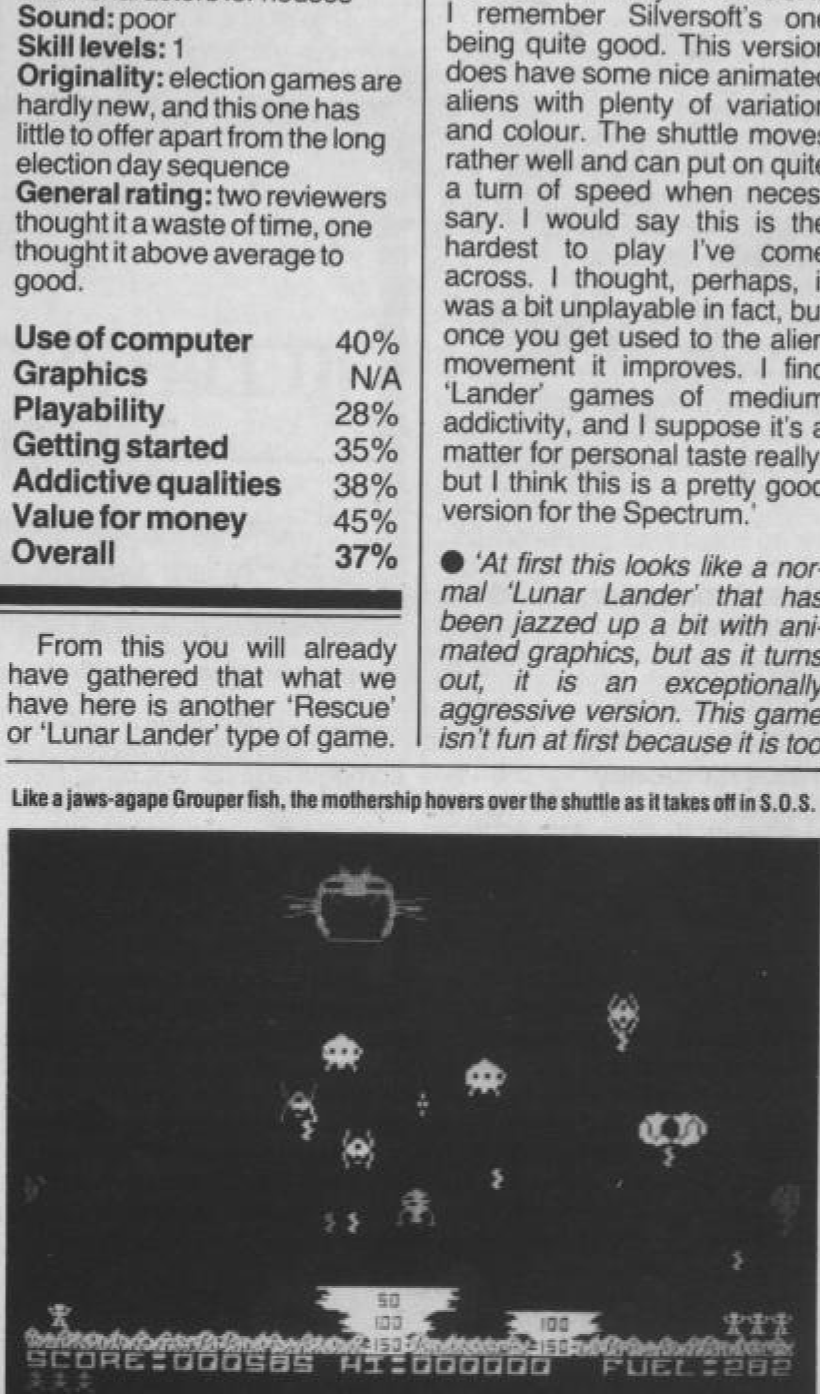
Progressing to harder screens, there are more aliens to dodge and pulsing stars appear at the edges of the landing sites, making the final approach more difficult. Points are scored for space debris shot to pieces and for the rescue of the stranded astronauts.

CRITICISM

● 'It does get a bit hard to determine the value and worth of a game like this because one has seen so many versions of it. I remember Silversoft's one being quite good. This version does have some nice animated aliens with plenty of variation and colour. The shuttle moves rather well and can put on quite a turn of speed when necessary. I would say this is the hardest to play I've come across. I thought, perhaps, it was a bit unplayable in fact, but once you get used to the alien movement it improves. I find 'Lander' games of medium addictivity, and I suppose it's a matter for personal taste really, but I think this is a pretty good version for the Spectrum.'

● *'At first this looks like a normal 'Lunar Lander' that has been jazzed up a bit with animated graphics, but as it turns out, it is an exceptionally aggressive version. This game isn't fun at first because it is too*

Like a jaws-agape Grouper fish, the mothership hovers over the shuttle as it takes off in S.O.S.



difficult, but as your skill improves, so does the fun. I think they've made the first screen too hard to be enticing. The graphics are unusual and varied and colour has been well used. But essentially this is a 'Lunar Lander', and if you like the game type, you'll probably enjoy this tough version, but generally I would say it isn't worth bothering with otherwise, because the game isn't original enough.'

● 'The best version I've seen on the Spectrum, with colourful aliens and meteors that move smoothly in all directions. I particularly like the way your rescued colonist falls out of the shuttle if you fail to dock accurately with the mother ship! Very painful. *S.O.S.* is quite tricky to play because of the proliferation of aliens, and therefore manages to hold the attention well. Quite addictive.'

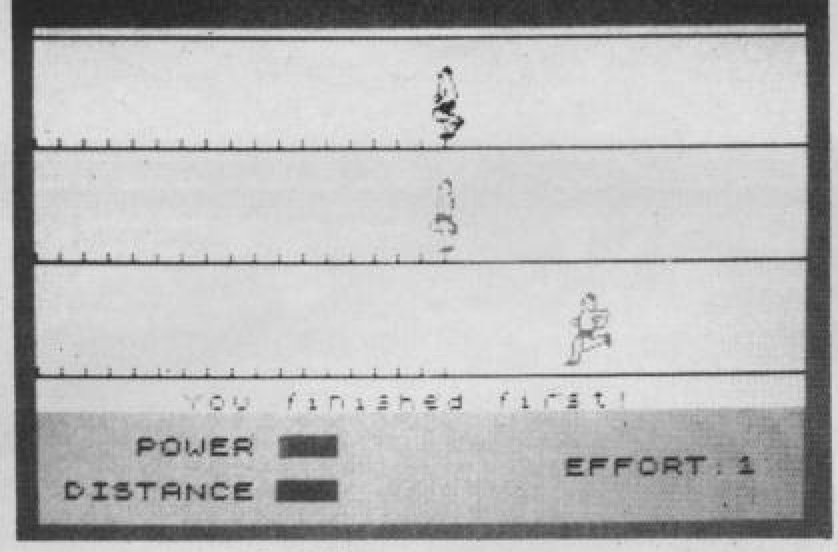
COMMENTS

Control keys: Z/X left/right, N to fire, M to thrust
Joystick: Kempston, ZX 2
Keyboard play: reasonable layout and responsive
Use of colour: good
Graphics: good
Sound: in space no one can hear you scream, but these aliens are fairly noisy
Skill levels: 1 but with progressive difficulty
Lives: 3
Originality: there have already been at least four versions before this one
General rating: generally considered the best version for the Spectrum of what is now an old game.

Use of computer	64%
Graphics	70%
Playability	58%
Getting started	65%
Addictive qualities	69%
Value for money	64%
Overall	**65%**

HOW THE RATINGS WORK

Under 30%	a waste of time
31-40%	generally poor, but may appeal to some
41-50%	average
51-55%	reasonable if type of game enjoyed
56-60%	good on most counts
61-70%	generally recommended
71-80%	highly recommended
81-90%	knight of the British Empire
Above 90%	words fail



One of the track events in Buffer's Athlete.

ATHLETE

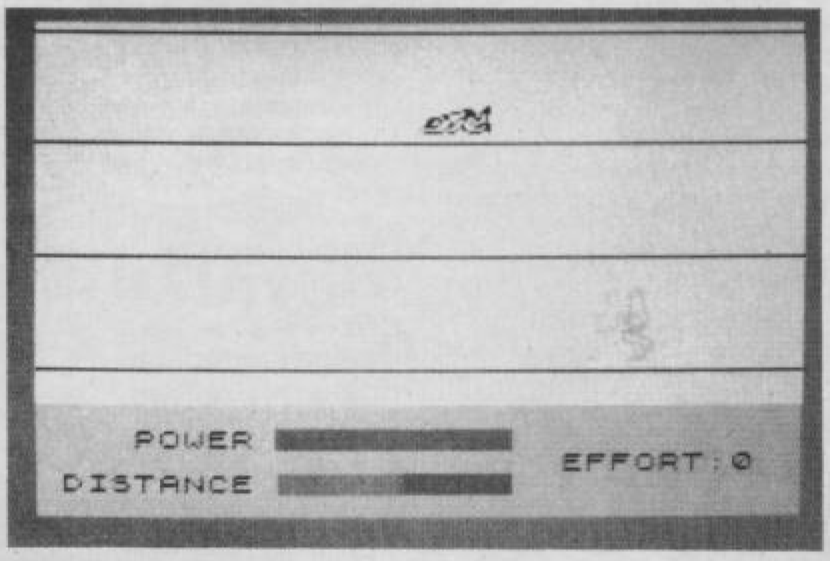
Producer: **Buffer Micro**
Memory required: **48K**
Retail price: **£5.50**
Language: **machine code and BASIC**
Author: **D. Webb**

Like *Micro Olympics* (Database, reviewed this issue), *Athlete* employs animated figures in the running events. These include the 100m and 400m sprint, the 110m and 400m hurdles. The only other event is the hammer throw. This is seen directly from above with the figure of the thrower as a pair of arms and a head in the circle.

In the running events you compete against two other runners controlled by the computer – this is a single player game. There are two bar codes at the base, one for power and one indicating distance to go. The speed of your runner is key controlled, but judgement is required to ensure you don't run out of power before the race finishes. In the hurdles the jump key is used to get over the obstacles and power is again a factor in winning.

In the hammer throw the character starts to spin and you must judge the right moment, as his speed increases, to loose the hammer. Waiting too long will result in a No Throw.

Before each event, which follows on automatically from the other, you may select the skill level from 1 to 10. The hammer throw is interspersed betwen the other events.



Yes, that's 'you', flat on your face after tripping over a hurdle.

CRITICISM

● '*Athlete* is a fairly playable game, it has a better running method than *Micro Olympics* – more practical anyway. The game tends to lack variety and atmosphere, with only running events and a poor hammer throw. I quite like the strategic element whereby energy has to be conserved and used appropriately. Overall, not as good as *Micro Olympics* but better than many we've seen.'

● *'The first thing I didn't like about this game was that a ten second delay occurs while a menu and other text is displayed, which happens between each complete game – not very good if you want to get on with the game. I found the game uncompetitive and, if anything, boring to play. The skill levels range frome easy to impossible, where you don't stand a chance against computer controlled athletes. Overall, not a very addictive, attractive and playable game.'*

● '*Athlete* is a lot better than the spate of running, jumping and standing still games we've seen recently, but it lacks mucn in the way of events and therefore in playability and addictiveness. The animated running men are quite good although the hammer throw is a bit basic looking. The running is controlled from the keyboard or joystick on a fast, slow, jump basis, which is kinder to the computer than the method employed in *Micro Olympics*, but it simply isn't as much fun either. I became bored quite quickly with this one.'



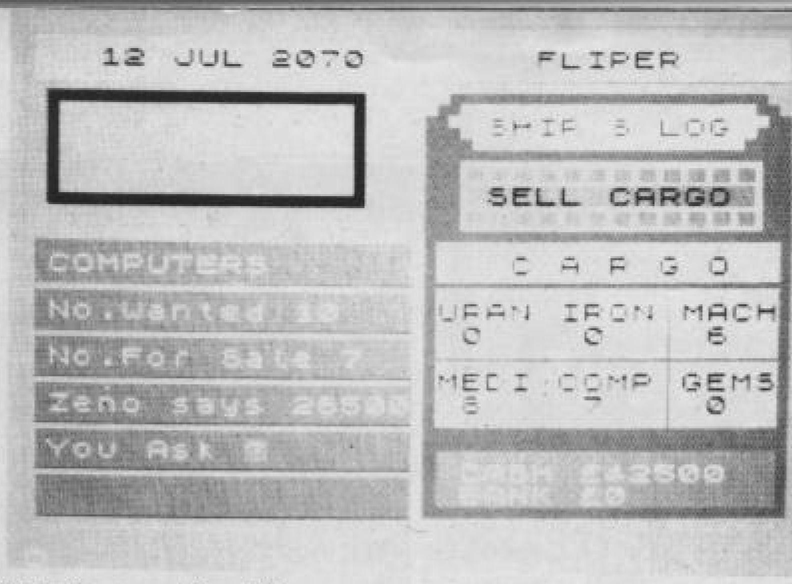
COMMENTS

Control keys: 5 or 6/7 and 8 faster/slower, 0 to jump
Joystick: AGF, Protek, Kempston, ZX 2
Keyboard play: responsive, easy to use
Use of colour: not much
Graphics: average to fair, reasonable animation
Sound: very poor to none
Skill levels: 10
General rating: fair to average.

Use of computer	60%
Graphics	58%
Playability	47%
Getting started	57%
Addictive qualities	39%
Value for money	45%
Overall	**51%**

PLANETFALL

Producer: **Argus Press Software**
Memory required: **48K**
Retail price: **£6.95**
Language: **BASIC with machine code**
Author: **T. Garden (Spectrum adaption by P. Rawling)**



The trading screen of Planetfall.

Planetfall comes is a larger sized cassette box containing detailed instructions on what is in fact a trading strategy type game. Between 2 and 12 players may take part, handing one or more cargo ships across the gulfs of space between a maximum of 15 star systems. Your ships can carry up to six commodities which are in demand in varying quantities at different star systems; these are Uranium, Iron Ore, Machinery, Medical Supplies, Computers and Gemstones.

At the outset, if you are not loading a saved game, the players are asked to enter their names, the number of ships they wish to own and then the names of the ships. Next task is to decide on how many star systems are desired by the players and enter that. The display then cuts to the Galaxy Map, a two-dimensional representation showing the relative positions of the star systems chosen with Sol in the centre.

A key-press takes you to the Commodity price list and time display. This list shows the buying and selling prices of all commodities on the various planets – planets never buy and sell a commodity at the same time. Travel time from your current position is also shown, and this is important later on. Each player is allocated some trading cargo at the outset, the number of items being shown and a start cash balance of £5,000. At the base of the display the Captain and Ship are indicated and you are asked to which star you wish to travel next. The star is selected by pressing its Initial letter. The process is repeated for each player, ship by ship. When this is completed an ETA of planetfall is shown, followed by the first player's ship's log. This indicates any travel delays and reasons and arrived at destination. Occasionally you may actually discover a new system which will then be displayed on the Galaxy Map.

The ship's log then becomes the Trading Display. A flash tells you whether you are selling or buying, and the commodity in question is displayed, the number of units the planet wishes to buy from you and underneath that you may enter the number you wish to sell. The planet will then make an offer over which you can haggle until a deal is settled or falls through. After selling you can start buying along similar lines. When all is complete you may deposit money at the local bank if you wish and you are then asked which destination you wish to visit next. Pressing the X key will display the menu so that you can have a look at the Commodities and Travel display again to judge the most suitable destination for your cargo.

Additional details are the bank statement which shows deposited money and assets for all players, and the random element of Urgent Messages. This details the urgent need for a commodity on one of the start systems and you must dash to be there first.

CRITICISM

● 'Obviously not a game of much fun for the single player. The program never really supplied enough information on which player was having his or her go I found myself lost in space in what was an uninteresting game.'

● *'Whatever images the name* Planetfall *conjures up of intergalactic mega-bug-blasting would be wrong, because this is a trader game and it is one of the best trader games I've played in a long time. The game is fun to play because it is self explanatory and easy to play. The display is well thought out and laid out in an easy to see manner. If you want a trader game, this is definitely one to buy.'*

● '*Planetfall* has the advantage of being very flexible, allowing you to determine the length of game and its complexity. It's really designed to let lots of players take part, but I suspect that more than four would tend to drag things out such a lot. Each player doesn't have too much to do, but as the game progresses you begin to realise that careful planning of buying and selling, as well as picking the planets to do it all on, is very important. Input routines are quite rapid and the whole is well thought through.'

COMMENTS

Control keys: general inpur
Use of colour: good
Graphics; text only
Sound: poor, optional on or off
Skill levels: 1
Screens: 11 displays
Features: 2-12 players
Originality: overall concept is not uncommon and originality hardly enters into this type of game
General rating: above average to good, with one reviewer not enjoying it at all. Good value for larger groups who like this type of game.

Use of computer	62%
Graphics	N/A
Playability	69%
Getting started	73%
Addictive qualities	65%
Value for money	70%
Overall	**68%**



THE FALL OF ROME

Producer: **Argus Press Software**
Memory required: **48K**
Retail price: **£6.95**
Language: **BASIC**
Author: **M. Edwards (Spectrum version by P. Rawling)**

This strategy game is set in the period starting from 395 AD, the moment when the sweeping pressure of the barbarian tribes finally forced the Roman Empire to its knees. The object of the game is to see whether, by skill and manipulation of the forces at your command, you can alter the events of history and maintain Rome as a great empire. *The Fall of Rome* is for one player against the computer.

All the events take place on a map of Europe which is divided by red border lines into the various provinces. At the start of the game you are shown those which are under Rome's control. Playing is split into three distinct phases. During the first you are asked to create and move your forces province by province and any money balances left over. Your military forces are split into Mobile and Static legions, Cavalry units and Auxilaries. You are allowed to create one mobile legion per province per turn if you have sufficient funds. Static legions are converted from mobile ones but, once converted, may not be changed back. Again, depending on funds, you may create cavalry or auxilary units in a strict ratio to the number of mobiles in the province. If any



money is left over, it may be moved to one of the adjacent provinces indicated on the map where it may do more than leaving it where it is.

The second phase is the movement part of the game. Here you are asked how many mobile legions you wish to move, again, province by province. The same goes for cavalry and auxilaries if there are any present. With each province, the map will indicate the possible destinations of the movement.

The third, or attack phase, shows you how many enemy tribes there are in the various provinces where Roman military forces have been moved, and it gives their varying strengths. You are allowed to attack one enemy per province per move. The computer calculates the result based on enemy strengths and Roman forces available. this completes a turn and one turn represents five years. At the commencement of the second turn you can see how well you have done, where you have hung on and where you have lost control.

CRITICISM

● '*The Fall of Rome* is quite playable but it misses the quality that makes adventures, strategies and some arcade games good, the quality of making the player believe he is in the situation depicted by the computer. The graphics aren't bad, but a game about the fall of Rome doesn't need graphics – after all, adventures and strategies are in the mind of the player.'

● *'I'm a little surprised at Argus for their covers on these games. Nowhere does it state which computer the game is for, although there are obviously several versions available, and yet inside on the inlay it states that you should check on the cover carefully to see if you have the right version for your computer! The instructions are reasonably comprehensive and the game is easy to handle after a few minutes' playing. The map is well generated and the included insert showing the names of provinces is useful – it doesn't, however, tie up fully with the map on the screen which is confusing when you want to move troops into unoccupied areas. The element of strategy is interesting when replaying real history, even within the confines of what is a very limited amount of memory for this type of game. I found coping with troop movements was easy and interesting for a while, but this is not a fully blown strategy war game and it therefore has its limitations. It also lacks something in 'atmosphere'. There is undoubtedly a major war game yet to be written along these lines. It seems a pity that on the whole most clever or sophisticated programmers want to work on more glamorous projects than war strategy games.* The Fall of Rome *is quite educational, a reasonable amount of fun at first, but not really exciting enough in the end to appeal all that widely.'*

COMMENTS

Control keys: general input of figures or first three letters of a province
Keyboard play: a user-friendly program with good error trapping
Repsonses: the BASIC program works with commendable speed and computer assessment time is kept to a minimum
Use of colour: sensible rather than exciting
Graphics: very good map, clear display
Sound: poor
Skill levels: 1
General rating: for strategy fans and younger players this could be worthwhile, as there is a fair amount to handle. Overall on the average side.

Use of computer	65%
Graphics	54%
Playability	52%
Getting started	63%
Addictive qualities	47%
Value for money	49%
Overall	**55%**





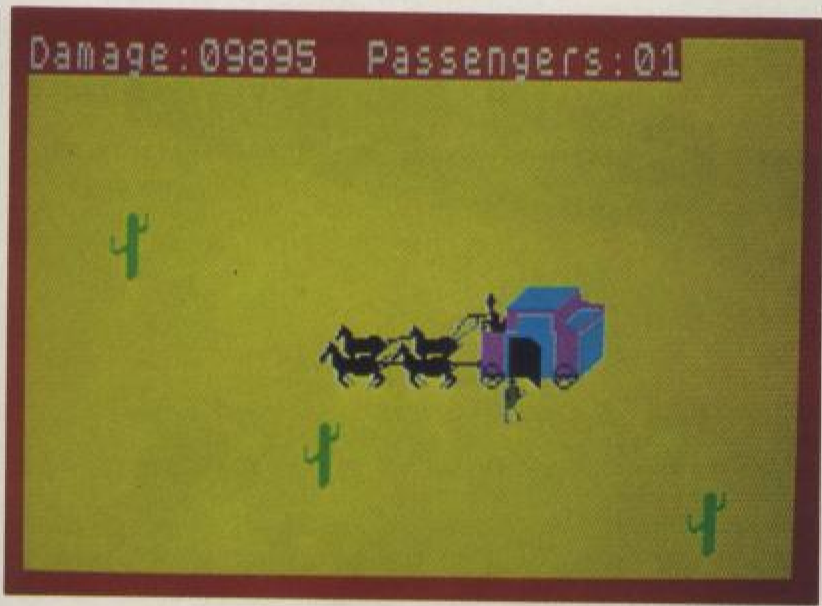
STAGE-COACH

Producer: **Creative Sparks**
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **John Harris**

The West has never been wilder! The driver of the San Pedro stage has been shot in an ambush and the coach is out of control. Creative Sparks bring you three different screens of action in this unusual arcade style game. *Stagecoach* employs an isometric 3D style perspective view where positioning of the characters plays a part in getting through.

The object is to leap onto the stage, get the horses under control and drive the stage on its way, collecting passengers, boxes of ammo or gold and steering a safe course through the dangerous Sierra Peligrosa mountains, avoid the Comanche indians, and finally arrive safely at the small mining town of San Pedro. This is everyone's chance to become John Wayne.

The first screen is called The Jump. Here you see yourself riding on your horse through a barren desert. But it isn't so barren. The sand is strewn with cacti, animal bones, graves and other debris. Running into anything will unhorse you. The computer automatically picks you up and limps you back to the horse. Pressing the fire button will remount you, but watch out for the cactus plants. Remounting near one will just cause you to fall of again. Fortunately, you can walk your horse past them. Slowing down, you see the San Pedro stage, driverless and plunging forwards to catch you up. It veers all over the place. You must now ride up behind it and leap onto the roof, then walk across the roof and take the reins. Having gained control of the



"Pass further down the car please" – picking up a passenger

coach you must now drive it on, slowing to let passengers board. Care is required or you'll miss them as they jump up and down in rage, worse still, you could run them over.

Picking up enough passengers will move you onto the second screen, the San Peligrosa mountains. This section of the game requires you to drive between the precipitous mountains, find the way through without damaging the coach too much, avoiding rockslides, and collect boxes of gold or ammunition. All the details can be seen on the map facility. Survive the mountains for a set period of time and you will emerge onto the Indian plain. These ferocious savages will ride up, one to the front and two to the side, preventing you from steering the coach, while a fourth will attempt to jump on the stage, grabbing passengers. All you can do is get up on the roof and attempt to shoot them. If an indian gets up onto the roof when you are up there, or when there are no more passengers left, then the game will end. It will also end if the damage points mount too high in the mountains, or you fail to pick up passengers in time on the first screen.

There are four skill levels which affect how much the stage moves about while trying to mount it, how close you must stop to passengers to collect them, the length of time allowed for collecting gold in the mountains, how much damage a rockfall will do, and the distance from town you emerge from the mountains. Apart from the display, other information provided is damage points, number of passengers, damage points, gold and ammo collected and distance to town and time spent in mountains. This information can be accessed by a key press, otherwise the screen only shows the game.

CRITICISM

● 'Yep, I sure found it difficult to jump up onto the stagecoach in the first part of the game, but on doing so I rode the coach into the mountains. There manoeuvering was made easier by the helpful arrows which indicate an open ended direction, and an ability of the horses to reverse (clever horses)! This is a good game which I enjoyed; a point against it though was the long time between starting again after hitting a cactus – but then I noticed that you can speed this up by pressing H. Perhaps there was a lack of sound, but overall, pretty good pardner!'

● *'I felt this was a bit of a disappointment after* Orc Attack, *nevertheless, it should take a long time to master. Instructions are excellent and extensive. Playing the game is quite difficult, more so on the second screen in the mountains. Compared to* Orc Attack, *the graphics are rather plain although the animation is quite good. There could have been some improvement on the general detail especially the way the stage turns, which it does by rotating through 45° very suddenly, and not squashing up in perspective. This makes the turn look rather unrealistic. Good features are the bucking horse, riding indians and also the way that they drag passengers out of the coach. I would have thought colour and sound could have been put to better use, but saying this,* Stagecoach *will provide hours of skillful fun.'*

● 'The perspective view of *Stagecoach* is a little similar to that in *Ant Attack*, although it looks a little ungainly when the coach is going away from you. But the animation of 'you', your horse, the passengers and the indians is excellent and quite realistic. There's also quite a bit more to do in this game than in *Ant Attack*. Positioning yourself to jump is very tricky, especially with the cactus plants popping up from behind the coach. The presentation and instructions on the inlay are very detailed, and the overall control seems to work very well when you get used to the perspective.'

COMMENTS

Control keys: user-definable, four directions and fire needed. H speeds up remounting, ENTER for the map
Joystick: ZX 2, Kempston, Fuller AGF, Protek
Keyboard play: very responsive
Use of colour: good
Graphics: good animation with lots of detail
Sound: good tune, otherwise limited
Skill levels: 4
Lives: percentage of damage or lack of passengers
Originality: a very unusual game
General rating: good to very good, playable and reasonably addictive.

Use of computer	89%
Graphics	75%
Playability	73%
Getting started	89%
Addictive qualities	72%
Value for money	76%
Overall	**79%**

Theres no need to run, – there'll be another along in a minute



NOT JUST A PRETTY (Inter)FACE!

The Spectrum dual port joystick interface is a highly versatile and price competitive joystick interface offering two joystick ports. The first port simulates 6,7,8,9, & 0 keys. The second port simulates in (31) command.
The ports will accept any Atari style joystick.

It will run any software. That is:-

- Using keys 6,7,8,9 & 0.
- Having redifinable key functions.
- Using in (31) (i.e. Kempston).



It's Available NOW!

Please rush me the following

.... Dual Port Joystick ....
Interface(s) @ £13.00 each .... £_____
Please add post and packing £1.25
I enclose cheque/PO/Cash for ...... Total £_____
or debit my Access/Barclaycard No.
□□□□□□□□□□□□□□□□

Signature ______________ Name ______________
Address ______________
Or send S.A.E. for the New D.K.Tronics Spectrum Catalogue C9.84

"Available direct or from good computer shops anywhere"

dk'tronics

DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden,
Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection

NOT JUST A PRETTY Inter FACE!

This superb new interface is one of our very latest developments for your Spectrum. Offering even more features, as it's programmable from the keyboard or with the cassette supplied you can now use it with any software. Programmable for up to 17 directional movements i.e. diagonal and fire.

Features include:

- 17 directional movements
- Keyboard remains fully functional
- Works with quick shot to rapid fire actions
- Rear connector for other add-ons
- Microdrive compatible

Quickshot Joystick I© £9.95

- Super positive response
- 2 fire buttons
- Stabilising suction caps
- 4ft lead

Quickshot Joystick II© £12.95

Incorporating all the features of 'Quickshot 1' plus

- Improved control grip
- Trigger fire button
- Rapid fire option



ONLY **£22.95**

It's Available NOW!

NEW!

Please rush me the following
.... Programmable Joystick Interface .... £______
..... Quickshot Joystick I .... £______
.... Quickshot Joystick II .... £______
Please add post and packing £1.25
I enclose cheque/PO/Cash for .... Total £______
or debit my Access/Barclaycard No.
Signature ______ Name ______
Address ______
Or send S.A.E. for the New D.K.Tronics Spectrum Catalogue

C9.84

"Available direct or from good computer shops anywhere"

dk'tronics

DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden, Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection

SOUND IDEAS FOR YOUR SPECTRUM

The Three Channel Sound Synthesiser interface incorporates a BEEP audio amplifier and a 3 channel sound synthesiser.
The BEEP amplifier improves the sound quality and output of the BEEP enormously. The 3 channel sound synthesiser adds a totally new dimension to sound on your Spectrum. It allows you to program your own music with harmonies, explosions, zaps, chimes, whistles and an infinite range of other sounds over a full 8 octaves.

Based around the popular AY-3-8912 sound chip it gives you complete control (from basic or M/C) over 3 channels of tone and/or white noise, plus envelope and volume control. It comes with its own pod mounted (4″) speaker with 1 metre of cable so that it can be positioned anywhere.
Once this is fitted to the expansion port your programs will never sound the same again!



ONLY £29.95

It's Available NOW!

Please rush me the following

.... Three Channel Sound ....
Synthesiser Interfaces @ £29.95 each. £_____
Please add post and packing £1.25
I enclose cheque/PO/Cash for ...... Total £_____
or debit my Access/Barclaycard No.

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature ________ Name ________

Address ________

Or send S.A.E. for the New D.K.Tronics Spectrum Catalogue

C9.84

NEW!

"Available direct or from good computer shops anywhere"

dk'tronics

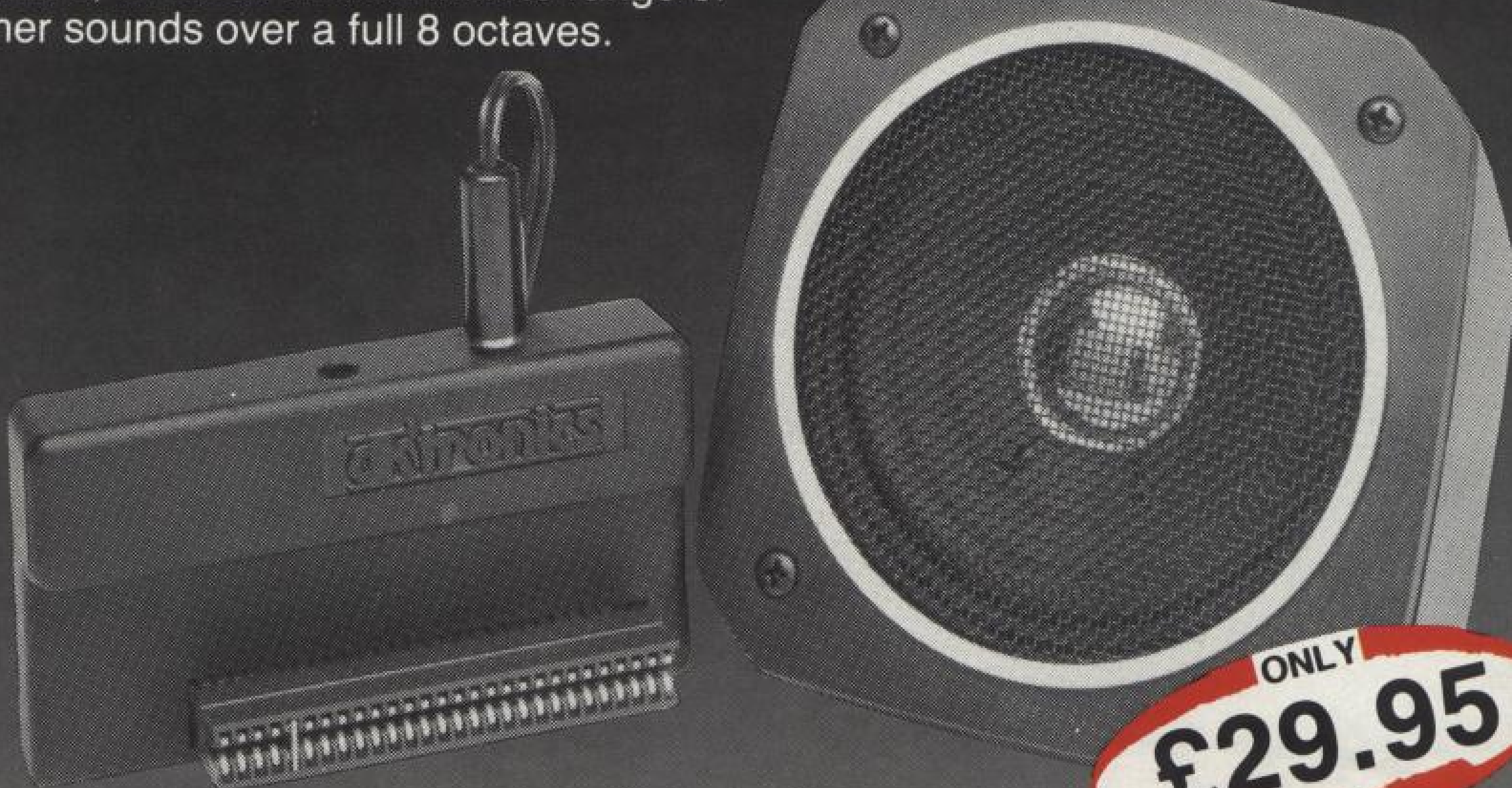
DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden, Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection

SOUND IDEAS FOR YOUR SPECTRUM

The Three Channel Sound Synthesiser interface incorporates a BEEP audio amplifier and a 3 channel sound synthesiser.
The BEEP amplifier improves the sound quality and output of the BEEP enormously. The 3 channel sound synthesiser adds a totally new dimension to sound on your Spectrum. It allows you to program your own music with harmonies, explosions, zaps, chimes, whistles and an infinite range of other sounds over a full 8 octaves.

Based around the popular AY-3-8912 sound chip it gives you complete control (from basic or M/C) over 3 channels of tone and/or white noise, plus envelope and volume control. It comes with its own pod mounted (4″) speaker with 1 metre of cable so that it can be positioned anywhere.
Once this is fitted to the expansion port your programs will never sound the same again!



ONLY £29.95

It's Available NOW!

Please rush me the following

.... Three Channel Sound Synthesiser Interfaces @ £29.95 each. £_____

Please add post and packing £1.25
I enclose cheque/PO/Cash for ...... Total £_____
or debit my Access/Barclaycard No.

Signature ______ Name ______

Address ______

Or send S.A.E. for the New D.K.Tronics Spectrum Catalogue CM.9.84.

Orders normally dispatched within 48 hrs

"Available direct or from good computer shops anywhere"

dk'tronics

DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden, Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection

NOT JUST A PRETTY Inter FACE!

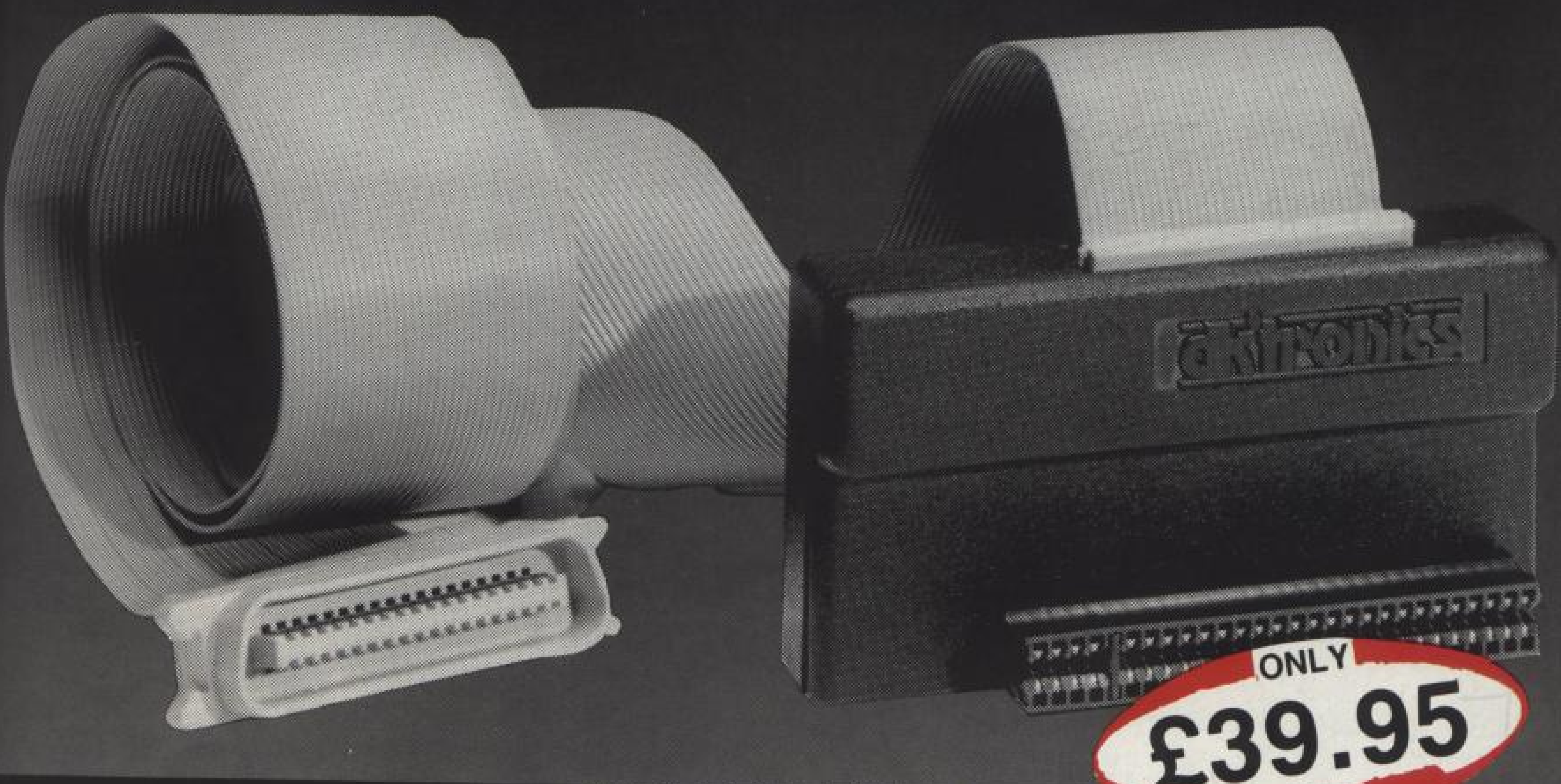
The new dk'tronics Parallel Centronics Interface will link your Spectrum to any printer with a standard centronics input. As the choice is vast, you can select the printer exactly suited to your needs.

Features of the Interface include:

- Runs all parallel centronics type printers
- Controlling software fully relocatable
- Interfaces with any software using the printer channel e.g. Tasword Dev pack etc.
- LLIST LPRINT recognised. High res screen dumps
- All control codes allowed through to printer
- Fully microdrive compatible
- Supplied with full instructions and controlling software

All dk'tronics products are covered by a comprehensive guarantee.

Available now! Post the coupon today



ONLY £39.95

It's Available NOW!

NEW!

Please rush me the following

.... Parallel Centronics Interface(s)........................ £______

Please add post and packing............ £1.25
I enclose cheque/PO/Cash for ...... Total £______
or debit my Access/Barclaycard No.

Signature ______ Name ______

Address ______

Or send S.A.E. for the New D.K.Tronics Spectrum Catalogue CM.9.84.

"Available direct or from good computer shops anywhere"

dk'tronics

DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden, Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection

NOT JUST A PRETTY Inter FACE!

Our new generation light pen and interface is designed specifically for your Spectrum and works down to pixel level for complete accuracy.

Now you can produce high resolution illustrations with the 16 pre-defined instructions, selected from the screen controlled menu. Change colour, border, paper, ink. Draw circles, arcs, boxes or lines. You can fill in objects with colour, insert text or draw freehand, save and load completed or partially completed screens onto and from a tape and with a 48K Spectrum retain screens in memory and animate.

You can also use the machine codes in your own programmes for selecting from a menu, playing games etc. (all entry points supplied).

The interface fits neatly into position and comes complete with software cassette.



ONLY £19.95

Please rush me the following

.... Light Pen and Interface(s) .... £______

Please add post and packing £1.25

I enclose cheque/PO/Cash for Total .... £______

or debit my Access/Barclaycard No.

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature ____________________ Name ____________________

Address ____

CM.9.84.

dk'tronics

DK Tronics Ltd., Unit 6, Shire Hill Industrial Estate, Saffron Walden, Essex CB11 3AQ. Telephone: (0799) 26350 (24 hrs) 5 lines

The Spectrum Connection